UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
FORT WORTH DIVISION

SALVADORA ORTIZ and THOMAS SCOTT, on behalf of themselves and all others similarly situated, Plaintiffs, v. AMERICAN AIRLINES INC., THE AMERICAN AIRLINES PENSION ASSET ADMINISTRATION COMMITTEE, and AMERICAN AIRLINES FEDERAL CREDIT UNION, Defendants.	§ § § § § § § § § § § § § § §	Case No. 4:16-cv-00151-A

DEFENDANTS AMERICAN AIRLINES, INC.'S AND THE AMERICAN AIRLINES PENSION ASSET ADMINISTRATION COMMITTEE'S NOTICE OF FILING EXPERT REPORTS

Pursuant to this Court's June 15, 2020 Order (ECF No. 167), Defendants, American Airlines, Inc. and the American Airlines Pension Asset Administration Committee, submit the expert reports of (1) Francis A. Longstaff and (2) Walter N. Torous. The written reports of Mr. Longstaff and Mr. Torous, along with the information requested by this Court, are attached hereto as **Exhibit 1** and **Exhibit 2**, respectively.

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CERTIFICATE OF SERVICE

On July 13, 2020, a true and correct copy of the foregoing document was served upon all persons who have requested notice and service of pleadings in this case via the Court's CM/ECF system.

Lars L. Berg
Lars L. Berg

EXHIBIT 1

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
FORT WORTH DIVISION

SALVADORA ORTIZ and THOMAS SCOTT, on behalf of them and all others similarly situated, Plaintiffs, v. AMERICAN AIRLINES INC., THE AMERICAN AIRLINES PENSION ASSET ADMINISTRATION COMMITTEE, and AMERICAN AIRLINES FEDERAL CREDIT UNION, Defendants.	Case No. 4:16-cv-00151-A

EXPERT REPORT OF FRANCIS A. LONGSTAFF, PH.D., CPA, CFA

JULY 13, 2020

1. My name is Francis A. Longstaff. I am Professor and Allstate Chair in Insurance and Finance at the UCLA Anderson School of Management. Concurrent with my UCLA appointment, I was appointed as a visiting professor at the Haas School of Business at the University of California at Berkeley where I taught Finance courses in their Masters of Financial Engineering Program from 2001 to 2008, and also in 2016 and 2019.

2. On May 14, 2018, I submitted an expert report during the class certification phase of this matter ("May 2018 Report"). The May 2018 Report, along with its associated appendices and exhibits, has been included as Attachment A to this report. The May 2018 Report contains a discussion of my qualifications contains a complete statement of all opinions that I will express and the basis and reasons for them, along with the facts and data I considered in forming them. Those opinions and conclusions have not changed since the preparation of the May 2018 Report and my deposition on August 3, 2018.[1]

3. My curriculum vitae, including a complete listing of my publications, was included as Appendix A to the May 2018 Report. Since the preparation of that report, I have authored the following additional publications:

- Macroeconomic-Driven Prepayment Risk and the Valuation of Mortgage-Backed Securities (with M. Chernov and B. Dunn), *Review of Financial Studies* 31, 1132-1183, 2017.

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[1] During the preparation of this report, I became aware of two minor errors in the exhibits to the May 2018 Report.

First, in Exhibit 3, in the 2016 column for "Vanguard: How America Saves (Plans with 5,000 + Participants)," the two percentages should be reversed. Exhibit 3 lists 73% in the "Money Market" row and 65% in the "Stable Value" row, but the exhibit should list 65% in the "Money Market" row and 73% in the "Stable Value" row.

Second, the sources listed in Exhibit 4 include "Federal Reserve Economic Data, '10-Year High Quality Market (HQM) Corporate Bond Par Yield.'" It should read "Federal Reserve Economic Data, '5-Year High Quality Market (HQM) Corporate Bond Par Yield.'"

The correction of these errors does not change the opinions I expressed in the May 2018 Report and my deposition.

- Valuing Thinly Traded Assets, *Management Science* 64(8), 3868-3878, 2017.
- Corporate Taxes and Leverage: A Long-Term Historical Perspective (with M. Fleckenstein and I. Strebulaev), *Critical Finance Review*, forthcoming.
- The U.S. Treasury Floating Rate Note Puzzle: Is there a Premium for Mark-to-Market Stability, (with M. Fleckenstein), *Journal of Financial Economics*, forthcoming.
- Renting Balance Sheet Space: Intermediary Balance Sheet Rental Costs and the Valuation of Derivatives, (with M. Fleckenstein), *Review of Financial Studies*, forthcoming.
- Asset Mispricing, (with K. Lewis and L. Petrasek), *Journal of Financial Economics*, forthcoming.

4. In the last four years, I have testified as an expert in trial or deposition in the following matters:

- *Ellis, et al. v. Fidelity Management Trust Company*, Deposition, February 2, 2017.
- *Financial Guarantee Insurance Company v. The Putnam Advisory Company LLC*, Deposition, July 12, 2018.
- *Ortiz, et al. v. American Airlines, et al.*, Deposition, August 3, 2018.
- *Hoak, et al. v. Plan Administrator of the Plans of NCR Corporation*, Deposition, December 11, 2019.
- *Western Shoshone Identifiable Group, et al. v. The United States, et al.*, Deposition, May 29, 2020.

5. I am being compensated for my time in this case at an hourly rate of $1,000. Employees of Analysis Group, Inc., an economics research and consulting firm, working under my direction and supervision, have assisted me in this assignment and will likely assist in any future work. I have also receive a portion of Analysis Group's professional fees incurred in connection with supporting my work in this matter. In total, I have received $112,108.16 in compensation for my time in this case including time spent preparing the May 2018 Report, preparing for and attending my deposition, and preparing this report. I also expect to be compensated at that rate for any future work on this case including trial

testimony at my hourly rate, and I expect to continue to receive a portion of Analysis Group's professional fees incurred in connection with supporting my work in this matter.

6. Neither my compensation nor that of Analysis Group is contingent upon my findings or on the outcome of this litigation.

Francis A. Longstaff, Ph. D., CPA, CFA
July 13, 2020

ATTACHMENT A

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
FORT WORTH DIVISION

SALVADORA ORTIZ and THOMAS SCOTT, on behalf of them and all others similarly situated, Plaintiffs, v. AMERICAN AIRLINES INC., THE AMERICAN AIRLINES PENSION ASSET ADMINISTRATION COMMITTEE, and AMERICAN AIRLINES FEDERAL CREDIT UNION, Defendants.	Case No. 4:16-cv-00151-A

EXPERT REPORT OF FRANCIS A. LONGSTAFF, PH.D., CPA, CFA

MAY 14, 2018

Table of Contents

I. INTRODUCTION

A. Qualifications

1. My name is Francis A. Longstaff. I am the Senior Associate Dean and Director of the Doctoral Program at the UCLA Anderson School of Management, where I am also a full professor and hold an endowed chair in Finance as the Allstate Professor of Insurance and Finance. I have been a tenured professor at the UCLA Anderson School since 1993. From 1987 to 1993, I was a professor of Finance at the College of Business at The Ohio State University. I have held academic appointments for a total of 30 years. Concurrent with my UCLA appointment, I was appointed as a visiting professor at the Haas School of Business at the University of California at Berkeley where I taught finance courses in their Masters of Financial Engineering Program from 2001 to 2008, and also in 2016.

2. During my academic career, I have taught more than 60 courses on fixed income, derivatives markets and valuation theory, investments, and financial economics, at the undergraduate, masters, and Ph.D. levels. I have also taught extensively in many executive education programs, primarily for financial institutions. My main research interests include the study of fixed income markets and term structure theory, derivatives markets, credit risk, computational finance, the effects of liquidity on security valuation, asset-pricing theory, and the role of arbitrage in financial markets. My valuation models have been widely used on Wall Street and throughout the global financial markets. I am a Chartered Financial Analyst and a Certified Public Accountant. I am also a Research Associate of the National Bureau of Economic Research.

3. I have also worked as a consultant, providing advisory services to Blackrock Inc., Barclays Global Investors, Pacific Investment Management Company (PIMCO), First

Boston, Greenwich Capital, Citibank, Simplex Asset Management, Bank of America, Chicago Research and Trading, the Federal Reserve Bank of New York, and others. While on leave from UCLA from 1995 to 1998, I served as head of fixed income derivative security research at Salomon Brothers in New York. I also served as a Research Economist at the Chicago Board of Trade from 1984 to 1987. Before earning my Ph.D. in Finance at the University of Chicago, I was a Senior Consultant at Deloitte Haskins & Sells (now Deloitte & Touche), and prior to that, I worked in financial consulting and litigation support at JPS Financial Consultants. I began my career as a Mortgage Escrow and Lending Officer at American Equity Company. Altogether, I have over 35 years of experience in the financial industry.

4. I have published over 60 peer-reviewed papers in top ranked academic journals in finance, economics, management, and physics including *The American Economic Review*, *The Journal of Monetary Economics*, *The Journal of Finance*, *The Journal of Financial Economics*, *The Review of Financial Studies*, *Management Science*, *Nature*, and the *Astrophysical Journal.* These publications include “The TIPS–Treasury Bond Puzzle” (2014), “Asset Pricing and the Credit Markets” (2012), and “Corporate Bond Default Risk: A 150-Year Perspective” (2011). I have also served on the editorial boards of many academic and practitioner journals including *The Journal of Finance*, *The Review of Financial Studies*, *The Journal of Financial and Quantitative Analysis*, *The Review of Asset Pricing Studies*, the *Financial Analysts Journal*, *Journal of Fixed Income*, and the *Journal of Derivatives*.

5. My research is extensively cited in both the academic and practitioner literature. In particular, there are currently in excess of 22,500 Google Scholar[1] citations to my research papers. In addition, my work has received numerous awards including prizes in many of the top tier journals in academic finance or in the practitioner literature. These include the Barclays Global Investors / Michael Brennan Award for the best paper in *The Review of Financial Studies*, the Graham and Dodd Award from the *Financial Analysts Journal*, the Fama/DFA Prize of Capital Markets and Asset Pricing from the *Journal of Financial Economics*, the Amundi Smith Breeden Distinguished Paper Prize from the *Journal of Finance*, and the JFQA William F. Sharpe Best Paper Award from the *Journal of Financial and Quantitative Analysis*.

6. I have delivered numerous academic seminars at top financial research universities throughout the world including Harvard University, M.I.T., Boston College, Yale University, Princeton University, Columbia University, Cornell University, New York University, Baruch College, Duke University, Rutgers University, The University of Pennsylvania, The University of Chicago, Northwestern University, Carnegie Mellon University, Stanford University, UC Berkeley, UCLA, UC Irvine, the London Business School, The London School of Economics, Oxford University, INSEAD, and many others. I have also delivered numerous presentations at academic and professional financial conferences.

[1] Google Scholar Citations is a citation service provided free of charge. Like other citation tracking services, it tracks academic articles, but it also counts theses, book titles, and other documents towards author citation metrics.

7. In the last 25 years, I have testified as an expert witness in two other matters.[2]

8. My curriculum vitae, which is attached as **Appendix A**, provides more biographical details and contains a complete list of my writings.

B. Assignment

9. I have been retained as an expert by O'Melveny & Myers LLP ("Counsel"), counsel for the defendants American Airlines, Inc. and the American Airlines Pension Asset Administration Committee, in the matter of *Salvadora Ortiz and Thomas Scott v. American Airlines, Inc., The American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union*. I understand that Salvadora Ortiz and Thomas Scott (collectively "Named Plaintiffs") bring this action against American Airlines, Inc., the American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union (together, "Defendants") individually and on behalf of a claimed class of participants and beneficiaries of an American Airlines sponsored 401(k) plan formerly known as the $uper $aver (the "Plan").[3] Plaintiffs seek to represent the following Proposed Class:

> All [Plan] participants and beneficiaries … who invested directly in the AA Credit Union Fund or who indirectly invested in the AA Credit Union Fund by virtue of their investment in the Moderate Pre-Mixed Portfolio or

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[2] I have testified as an expert witness in the matter of The California Public Employees Retirement System (CalPERS) v. Moody's Corp, Moody's Investor Services Inc, Standard & Poor's, Fitch Inc., Fitch Group, Inc., Fitch Rating, Ltd., The McGraw Hills Companies on December 11, 2015, and James Ellis and William Perry v. Fidelity Management Trust Company on February 2, 2017.

[3] "Class Action Complaint (ERISA)," *Salvadora Ortiz and Thomas Scott v. American Airlines Inc., The American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union*, February 10, 2016 ("Complaint").

> the Conservative Pre-Mixed Portfolio at any time from February 12, 2010 through the date of judgment…[4]

10. I have been asked by Counsel to address the following topics:

    a. Evaluate whether a common method can be used to determine whether participants were harmed by a failure to include a stable value fund as a Plan investment option "either in place of or in addition to the American Airlines Credit Union Demand Deposit Option" (the "Credit Union Option")[5] on a class-wide basis, or whether individual inquiry would be necessary;

    b. Evaluate whether participants have a common interest in a determination by the Court as to whether the Credit Union Option is a prudent and permissible Plan option.

C. Preparation of Report

11. I am being compensated at a rate of $1,000 per hour for my work on this case, including any testimony. Employees of Analysis Group, Inc., an economics research and consulting firm, working under my direction and supervision, have assisted me in this assignment. I also receive a portion of Analysis Group's professional fees incurred in connection with supporting my work in this matter. Neither my compensation nor that of Analysis Group is contingent upon my findings or on the outcome of this litigation.

12. My opinions are based on my review of the documents and information produced in this case, as well as my education, knowledge, and experience in finance, investments, and retirement plans. **Appendix B** contains a list of materials that I, and others working under my direction, have reviewed and that I considered in preparing my report. My work on

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[4] "Plaintiffs' Motion for Class Certification," *Salvadora Ortiz and Thomas Scott v. American Airlines Inc., The American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union*, April 23, 2018 ("Plaintiffs' Motion for Class Certification"). I refer to the period from February 12, 2010 through the date of judgment as the Proposed Class Period. I refer to participants in the Plan that invested in the Credit Union Option as Proposed Class Members.

[5] "Plaintiff's Proposed Form of Notice to Members of the Proposed Class," *Salvadora Ortiz and Thomas Scott v. American Airlines, Inc., The American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union*, April 23, 2018 ("Plaintiff's Proposed Class Notice"), APPX11 – APPX18, at APPX12.

this matter is ongoing and my opinions are subject to revision based on new information, which subsequently may be provided to or obtained by me.

II. SUMMARY OF OPINIONS

13. Based on my research and analysis to date, I have reached the following opinions.

- Plaintiffs' inference of Plan-wide harm appears to be that a stable value fund should have been added to the Plan investment lineup earlier and that, had it been added, all assets invested in the Credit Union Option would have been invested in the stable value option instead. However, this theory is directly contradicted by the investment choices made by Named Plaintiffs, who did not allocate any portion of their accounts to the Plan's stable value option after it was added to the Plan's investment lineup. One of the Named Plaintiffs retained her Credit Union Option investments until she exited the Plan. The other moved his investments, not to the stable value option, but to other investment options, including a money market fund. (*See* **Section IV.**)
- Named Plaintiffs' investment decisions in this respect are not typical of the decisions of many other participants in the Proposed Class. For example, unlike Named Plaintiffs, some Proposed Class Members only participated in the Plan after the stable value option was added to the Plan's investment lineup and thus had the ability to allocate their accounts to that option throughout the entire time period that they had Plan accounts. Yet, given the choice between the Credit Union Option and a stable value option, these Proposed Class Members predominantly favored the Credit Union Option. Moreover, also unlike Named Plaintiffs, some Proposed Class Members withdrew their accounts from the Plan before the stable value option was added to the Plan's investment lineup. Thus, unlike the Named Plaintiffs, those participants never declined the opportunity to invest in the stable value option. Therefore, a common method cannot be applied to assess whether all Proposed Class Members were harmed under Plaintiffs' theory, and individualized inquiry would be necessary. (*See* **Section V.**)

- A theory advocating the removal of the Credit Union Option from the Plan would not avoid the need for individualized inquiry or make the Named Plaintiffs' interests representative of those of the Proposed Class Members. (*See* **Section VI.**)
    - It cannot be said that the substitution of a stable value option for the Credit Union Option would have uniformly caused participants to invest in the stable value option to the same extent that they invested in the Credit Union Option or to do so without also changing their allocations to other Plan options. For example, when the money market option was removed from the Plan's investment lineup, most participants that invested in that option did not reallocate their balances in the option to other capital preservation options. Furthermore, some participants have moved assets into a stable value option from investments other than the Credit Union Option. (*See* **Section VI.A.**)
    - Named Plaintiffs' interests in a theory that the Credit Union Option is an improper plan investment option are not representative of those of other Proposed Class Members. Removing the Credit Union Option would annul the investment decisions of those Proposed Class Members and would restrict their ability to control their retirement savings going forward. (*See* **Section VI.B.**)

14. I set forth my findings in more detail in the remainder of this report, including the associated exhibits and appendices.

III. BACKGROUND AND OVERVIEW OF CAPITAL PRESERVATION VEHICLES

A. American Airlines

15. American Airlines, founded in 1930 and headquartered in Fort Worth, is one of the largest airlines in the world.[6] The company is a wholly owned subsidiary of American

[6] "American Airlines Group: Parent company of American Airlines," *American Airlines*, 2018. Accessed January 31, 2018, <https://www.aa.com/i18n/customer-service/about-us/american-airlines-group.jsp>. *See also*, "Corporate Structure: American Airlines Group Inc.," *American Airlines*, 2018. Accessed January 31, 2018, <https://www.aa.com/i18n/customer-service/about-us/corporate-structure.jsp>.

Airlines Group, Inc. (formerly known as AMR Corporation ("AMR")),[7] and as of the end of 2016, employed 122,300 people worldwide.[8] American Airlines serves as the Plan's sponsor and administrator.[9]

B. American Airlines Federal Credit Union

16. The American Airlines Federal Credit Union ("AA Credit Union") is a non-profit, tax-exempt institution that was "founded in 1936 by a small group of American Airlines employees who shared the goal of creating a member-owned, cooperative financial institution where employees could help one another."[10] AA Credit Union has a net worth of more than \$646.1 million and assets surpassing \$6.3 billion (as of December 1, 2017).[11]

17. A credit union is a "not-for-profit financial institution cooperative organized to provide its members with a place to save and a source of loans at reasonable rates."[12] Credit unions are "corporations chartered under the *Federal Credit Union Act* to serve groups

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[7] American Airlines 2016 Form 10-K, filed February 22, 2017, p. 4.

[8] This includes 20,800 employees of wholly-owned regional carriers. American Airlines 2016 Form 10-K, filed February 22, 2017, p. 8.

[9] "Summary Plan Description for \$uper \$aver, a 401(k) Capital Accumulation Plan for Employees of Participating AMR Corporation Subsidiaries," *American Airlines*, July 2009 and amended August 24, 2010, AA-APP006 – AA-APP048, at AA-APP036.

[10] "About AA Credit Union," *American Airlines Credit Union*, 2018. Accessed January 31, 2018, <https://www.aacreditunion.org/about-aacreditunion.aspx>. *See also*, "Annual Report 2010: Helping Member-Owners Reach New Heights," *American Airlines Federal Credit Union*, 2010. Accessed April 26, 2018, <https://www.aacreditunion.org/pdf/annualreport2010.pdf>, p. 2.

[11] "About AA Credit Union," *American Airlines Credit Union*, 2018. Accessed January 31, 2018, <https://www.aacreditunion.org/about-aacreditunion.aspx>.

[12] "Federal Credit Union Handbook," *National Credit Union Administration*. Accessed February 6, 2018, <https://www.ncua.gov/Resources/Documents/CUDev/fcu_handbook.pdf>, p. 7.

having a common bond of occupation or association, or groups within a well-defined, local neighborhood, community, or rural district."[13]

C. The Plan

18. The Plan is a participant-directed 401(k) plan that is offered to employees of American Airlines and other participating subsidiaries of its parent corporation, American Airlines Group, Inc. 401(k) plans are tax advantaged retirement savings vehicles offered by many employers to assist their employees in saving for retirement.

19. Plan participants may contribute a portion of their pre-tax compensation to the Plan (subject to IRS limits) via an individual account.[14] American Airlines then matches up to 5.5% of the participant's contributions, depending on their employee designation.[15] During the Proposed Class Period, Plan assets ranged from approximately $6.2 billion to $10.6 billion and the number of participants ranged from approximately 75,000 to 105,000.[16]

20. Plan participants can allocate their individual account savings across any number of the investment options available in the Plan's investment lineup to develop a portfolio that achieves their preferred balance of risk and reward. As a general matter, investment objectives and risk tolerances differ across participants. Among the participant attributes

[13] "Federal Credit Union Handbook," *National Credit Union Administration*. Accessed February 6, 2018, <https://www.ncua.gov/Resources/Documents/CUDev/fcu_handbook.pdf>, p. 7.

[14] Plan participants may also elect to make post-tax contributions above the IRS limit.

[15] "Summary Plan Description for $uper $aver, a 401(k) Capital Accumulation Plan for Employees of Participating AMR Corporation Subsidiaries," *American Airlines*, July 2009 and amended August 24, 2010, AA-APP006 – AA-APP048, at AA-APP030.

[16] **Exhibits 1A–1B**; American Airlines Plan Participant Data.

that may influence a participant's investment decisions are his or her investments outside of the plan, investment time horizon, and risk tolerance.[17]

21. The Plan lineup contains a diversified set of investment options, including both passively and actively managed options. As of December 31, 2010, thirty investment options were available in the Plan. **Exhibit 1A** provides the assets invested in each Plan option as of year-end 2010 through 2014. The funds included in the Plan lineup span different asset classes including U.S. and international equity funds, fixed income funds, and the Credit Union Option. Participants also had the option of allocating their assets to one of three Pre-Mixed Portfolios (Conservative, Moderate, and Aggressive), each of which invested in funds offered in the Plan based on one of three investment risk profiles.

22. On October 17, 2015, after the merger between AMR and US Airways Group Inc. ("US Airways"), the US Airways 401(k) plan was merged into the Plan, and the Plan's investment lineup was revised (this event referred to herein as the "Plan Merger").[18]

23. The revised lineup contained 27 investment options, including the Credit Union Option and the Fidelity Managed Income Portfolio II ("MIP II") option, which is a stable value

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[17] Dammon, R, C. Spatt, and H. Zhang, "Optimal Asset Location and Allocation with Taxable and Tax-Deferred Investing," *The Journal of Finance,* Vol. 59, Issue No. 3, June 2004. Accessed May 9, 2018, <http://www.jstor.org/stable/3694729>; Bodie, Z., A. Kane, and A. Marcus, *Investments (Tenth Edition)*. (McGraw-Hill: New York, 2013), p. 10; Downes, J., and J. Goodman, *Dictionary of Finance and Investment Terms (Eighth Edition)*. (Barron's Educational Series: New York City, 2014), pp. 10-11. For example, an investor's risk profile may be affected by his or her age and salary. Generally, older investors will be more risk averse. For example, the Employee Benefit Research Institute reports that, as of 2012, participants in 401(k) plans in their 60s invested 15.3% of their assets in guaranteed investment contracts or stable value funds, whereas people in their 20s invested only 3.1% of their assets in such vehicles. In addition, participants with salaries over $100,000 invested 13.7% of their assets in guaranteed investment contracts stable value funds, compared to 18.1% for participants with salaries of $20,000 to $40,000. VanDerhei, J., *et. al.*, "401(k) Plan Asset Allocation, Account Balances, and Loan Activity in 2012," *Employee Benefit Research Institute*, Issue No. 394, December 2013. Accessed April 24, 2018, <https://www.ebri.org/pdf/briefspdf/ebri_ib_012-13.no394.401k-update-2012.pdf>, pp. 24, 26.

[18] After the Plan Merger, a separate plan was created for pilot employees, known as the American Airlines, Inc. 401(k) Plan for Pilots (the "Pilot Plan"). I understand that the Pilot Plan is not at issue in this case. Unless otherwise noted, the Pilot Plan is not included in my analyses.

fund.[19] The MIP II fund was replaced with the American Airlines Stable Value Fund ("AA Stable Value Fund") in June 2017.[20] The AA Stable Value Fund, in turn, invested in the Wells Fargo Stable Value Fund W.[21] In addition, the Plan offered the Fidelity Institutional Money Market Fund, which is a money market fund that was added as a Plan option in Q2 2015 and removed as an option during Q3 2016.[22]

24. Altogether, the new lineup included five passively managed collective investment trust options, six custom strategy investment options managed by multiple active investment managers, eleven target date funds, a self-directed brokerage account (through which participants could invest in thousands of other options),[23] and the aforementioned Credit Union Option, money market option, and stable value option. **Exhibit 1B** provides the assets invested in each Plan option as of year-end 2015 through 2017.

D. Capital Preservation Vehicles

25. Demand deposit funds (such as the Plan's Credit Union Option), money market funds, and stable value funds are examples of investments known as "capital preservation" (or "principal preservation") vehicles. A capital preservation vehicle prioritizes protecting the existing monetary value of investments therein over earning a return on those investments.

[19] American Airlines, Inc. 401(k) Plan / US Airways, Inc. Employee Savings Plan, "Time to learn: Investment Details Guide," *American Airlines*, October 31, 2015, AA-APP121 – AA-APP172, at AA-APP165 – AA-APP166.

[20] American Airlines, Inc. 401(k) Plan and American Airlines, Inc. 401(k) Plan for Pilots, "Re: Stable Value Investment Option Change," *American Airlines*, May 2017.

[21] American Airlines, Inc. 401(k) Plan and American Airlines, Inc. 401(k) Plan for Pilots, "Re: Stable Value Investment Option Change," *American Airlines*, May 2017.

[22] American Airlines Plan Participant Data.

[23] American Airlines, Inc. 401(k) Plan / US Airways, Inc. Employee Savings Plan, "Time to learn: Investment Details Guide," *American Airlines*, October 31, 2015, AA-APP121 – AA-APP172, at AA-APP162.

26. As this illustrates, the protection against loss offered by capital preservation vehicles can be valuable even if it results in investors receiving returns lower than the inflation rate. Indeed, consistently exceeding inflation is not a realistic goal for capital preservation options. The returns of even equity investment options have historically failed to consistently outperform inflation over an extended period of time.[24]

27. While the availability of capital preservation options has always been important, their importance came into greater focus during and after the late 2000s financial crisis. In 2008, U.S. stock price indices declined dramatically, with the S&P 500 Index losing 37% for the year.[25] This widespread decline in security prices resulted in substantial losses in participants' 401(k) accounts.[26] While the impact on 401(k) plan participants varied according to a number of factors, participants with more than $200,000 in account balances had an average loss of more than 25%.[27]

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[24] For illustrative purposes, I compared inflation against the returns of various investment indices over the (a) 1926 to 2009 period (i.e., the period prior to the Proposed Class Period), (b) 2010 to 2017 period (i.e., during the Proposed Class Period), and (c) over the entire 1926 to 2017 period (*See* **Exhibits 2A**–**2C**). I compared annual inflation rates against the annual returns to the following Ibbotson indices: U.S. 30-Day T-Bill Index, U.S. Intermediate Treasury Index, U.S. Long-term Treasury Index, U.S. Long-term Corporate Index, U.S. Small Stock Index, and the U.S. Large Stock Index. None of the indices were able to outpace inflation for each year of the periods analyzed. Over the 1926 to 2017 period, the returns of the U.S. Small Stock Index and U.S. Large Stock Index were most likely to exceed inflation, but even then, these indices were below inflation in 30.4% and 30.4% of years, respectively (*see* **Exhibit 2C**). During the 2010 to 2017 period, the U.S. 30-day T-Bill Index, for example, did not exceed inflation in any year during the period while the return of the U.S. Small Stock Index was below inflation in 25% of years (*see* **Exhibit 2B**). These analyses corroborate extensive academic research that even though riskier securities generally have higher average returns over the long run, this does not assure that they will have higher realized returns over shorter horizons.

[25] Morningstar Direct.

[26] VanDerhei, J., "The Impact of the Recent Financial Crisis on 401(k) Account Balances," *Employee Benefit Research Institute*, Issue No. 326, February 2009. Accessed February 14, 2018, <https://www.ebri.org/pdf/briefspdf/EBRI_IB_2-2009_Crisis-Impct.pdf>, p. 1.

[27] VanDerhei, J., "The Impact of the Recent Financial Crisis on 401(k) Account Balances," *Employee Benefit Research Institute*, Issue No. 326, February 2009. Accessed February 14, 2018, <https://www.ebri.org/pdf/briefspdf/EBRI_IB_2-2009_Crisis-Impct.pdf>, p. 1.

28. As illustrated in **Exhibit 3**, most 401(k) plans offer one or more capital preservation vehicles as investment options. For example, according to the Deloitte Annual Defined Contribution Benchmarking Survey, over the 2010 to 2017 period, between 73% and 85% of plans offered a stable value option. Similarly, between 53% and 62% of plans offered a money market option.[28] According to a set of surveys of Vanguard-recordkept plans with over 5,000 participants, between 57% and 65% of such plans offered a stable value option over the 2011 to 2016 period. Similarly, between 66% and 77% of such plans offered a money market option during the same period.[29] In addition, a large percentage of 401(k) plans offer multiple capital preservation vehicles as investment options. For example, a 2015 study by MetLife that Plaintiffs rely on in their Complaint shows that in 2015, 45% of plans offered both a stable value ***and*** money market option;

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[28] *Deloitte*, "Annual 401(k) Survey Retirement Readiness: 2010 Edition," 2010. Accessed March 28, 2017, <https://www.iscebs.org/Resources/Surveys/Documents/401(k)Survey_10.pdf>, p. 49, Exhibit 7.28; *Deloitte*, "Annual 401(k) Benchmarking Survey: 2011 Edition," 2011. Accessed January 23, 2017, <https://www.iscebs.org/Resources/Surveys/Documents/401kSurvey_11.pdf>, p. 54, Exhibit 7.26; *Deloitte*, "Annual Defined Contribution Benchmarking Survey: 2013–2014 Edition," 2014. Accessed February 14, 2018, <https://www.iscebs.org/Documents/PDF/Annual%20Defined%20Contribution%20Benchmarking%20Survey%20(2013%20Edition).pdf>, p. 24, Exhibit 5.1; *Deloitte*, "Annual Defined Contribution Benchmarking Survey: 2015 Edition," 2015. Accessed February 14, 2018, <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/human-capital/us-hc-annual-defined-benchmarking-survey-appendix.pdf>, p. 32, Exhibit 5.1; *Deloitte*, "Defined Contribution Benchmarking Survey: 2017 Edition," 2017. Accessed February 14, 2018, <https://www2.deloitte.com/us/en/pages/human-capital/articles/annual-defined-contribution-benchmarking-survey.html>, p. 20, Exhibit 6.3.

[29] *Vanguard*, "How America Saves 2012: A report on Vanguard 2011 defined contribution plan data," June 2012. Accessed July 28, 2017, <https://institutional.vanguard.com/iam/pdf/HAS12.pdf>, p. 51; Vanguard, "How America Saves 2013: A report on Vanguard 2012 defined contribution plan data," June 2013. Accessed July 28, 2017, <https://pressroom.vanguard.com/nonindexed/2013.06.03_How_America_Saves_2013.pdf>, p. 49; Vanguard, "How America Saves 2014: A report on Vanguard 2013 defined contribution plan data," June 2014. Accessed August 9, 2017, <https://institutional.vanguard.com/iam/pdf/HAS14.pdf>, p. 49; *Vanguard*, "How America Saves 2015: A report on Vanguard 2014 defined contribution plan data," June 2015. Accessed July 28, 2017, <https://pressroom.vanguard.com/news/Vanguard_Releases_2015_Edition_of_How_America_Saves_060915.html>, p. 55; *Vanguard, "How America Saves 2016: A report on Vanguard 2015 defined contribution plan data," June* 2016. Accessed August 23, 2017, <https://pressroom.vanguard.com/nonindexed/HAS2016_Final.pdf>, p. 61; *Vanguard*, "How America Saves 2017: Vanguard 2016 defined contribution plan data," June 2017. Accessed August 15, 2017, <https://pressroom.vanguard.com/nonindexed/How-America-Saves-2017.pdf>, p. 55.

38% offered a stable value option as their ***only*** capital preservation option, and 18% provided a money market option as their only capital preservation option.[30]

29. As I discuss below, there are differences among the various types of capital preservation vehicles that can be offered as defined contribution plan investment options.

1. Overview Of Relevant Capital Preservation Vehicles

i. Money Market Funds

30. A money market mutual fund is a type of fixed income mutual fund that is required by federal regulation to invest in debt securities that have very short maturity[31] and high credit quality. The returns of a money market fund are not guaranteed, but have historically been positive as a result of the low risk of the fund's underling investments. The types of debt securities that money market funds invest in include U.S. Treasury securities, municipal securities, commercial paper, and certificates of deposit.[32]

ii. Federally Insured Demand Deposit Funds

31. A demand deposit fund is a fund held in a demand deposit account—such as a checking account—at a credit union, bank, or other financial institution.

32. The Credit Union Option is a demand deposit fund offered by the AA Credit Union. Eligibility for membership in a federal credit union is limited to the people sharing the

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[30] Complaint, ¶ 16; *MetLife*, "2015 Stable Value Study: A Survey of Plan Sponsors, Stable Value Fund Providers and Advisors," 2015. Accessed January 24, 2018, < https://www.metlife.com/content/dam/microsites/institutional-retirement/pdf/2015_StableValueStudy.pdf>.

[31] Prior to May 5, 2010, money market funds were required to have a maximum dollar-weighted average maturity of 90 days; thereafter the maximum average maturity was reduced to 60 days (Murphy, E., "Money Market Fund Reform," *U.S. Securities and Exchange Commission*, Release No. IC-29132, February 23, 2010. Accessed April 19, 2018, <https://www.sec.gov/rules/final/2010/ic-29132.pdf>, p. 37).

[32] Schapiro, M., "Testimony on 'Perspectives on Money Market Mutual Fund Reforms,'" *U.S. Securities and Exchange Commission*, June 21, 2012. Accessed April 23, 2018, <https://www.sec.gov/news/testimony/2012-ts062112mlshtm>; "What are money market funds?" *Fidelity*, 2018. Accessed February 1, 2018, <https://www.fidelity.com/learning-center/investment-products/mutual-funds/what-are-money-market-funds>.

common bond described in the credit union's field of membership, as set forth in its charter.[33] The AA Credit Union is restricted to people working in the air transportation industry and their families.[34]

33. Each investor in a credit union demand deposit account, including the Credit Union Option, is insured by the National Credit Union Administration ("NCUA") up to $250,000.[35] Therefore, even in the event of the credit union failure, investors will not lose their money up to a limit of $250,000 per investor. And indeed, according to the NCUA, "[c]redit union members have ***never*** lost a penny of insured savings at a federally insured credit union."[36]

34. This federal protection shielded the overwhelming majority of Plan investments in the Credit Union Option from risk of loss. An analysis of the Plan participant data shows that during the Proposed Class Period, more than 95% of participants had a balance of less than $250,000 in the Credit Union Option, meaning that their principal and accrued interest in the Credit Union Option was fully guaranteed. The federal guarantee has value, as indicated by **Exhibit 4**, which shows that investors in investment-grade corporate bonds demanded higher interest rates than investors in treasury bonds of similar

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[33] "Federal Credit Union Handbook," *National Credit Union Administration*. Accessed February 6, 2018, <https://www.ncua.gov/Resources/Documents/CUDev/fcu_handbook.pdf>, p. 13.

[34] "Eligibility," *American Airlines Credit Union*, 2018. Accessed January 31, 2018, <https://www.aacreditunion.org/eligibility.aspx>.

[35] "How Your Accounts Are Federally Insured," *National Credit Union Administration*, February 2018. Accessed March 9, 2018, <https://www.ncua.gov/legal/guidesetc/guidesmanuals/ncuahowyouracctinsured.pdf>; American Airlines, Inc. 401(k) Plan / US Airways, Inc. Employee Savings Plan, "Time to learn: Investment Details Guide," October 2015, AA-APP121 – AA-APP172, at AA-APP147.

[36] "Share Insurance Fund Overview," *National Credit Union Administration*, October 19, 2017. Accessed April 23, 2018, <https://www.ncua.gov/services/pages/share-insurance.aspx>. Emphasis added.

duration and credit quality during the Proposed Class Period.[37] The fact that investors receive higher interest rates for investment-grade bonds shows that investors perceive these high quality bonds, which have the lowest probability of default among corporate bonds, as carrying greater risk than treasury bonds and that they receive some value from the protection offered by the federal guarantee.

iii. Stable Value Funds

35. Stable value funds are another type of fixed income vehicle designed to seek the preservation of capital. While stable value funds come in a variety of different structures, at their core, they share two features: (1) a portfolio of underlying fixed income investments, and (2) a limited "guarantee" from an insurance company or other financial institution that, in contractually specified circumstances, the investor will be able to withdraw his or her principal plus any accumulated interest (the so-called "book value" of his or her investments).

36. In some structures (*e.g.*, guaranteed investment contracts), the stable value fund's assets are held by an insurance company providing the "guarantee," and may be subject to the claims of some or all of the company's other creditors should the company become insolvent.[38] In another common structure (such as that employed by the stable value options offered by the Plan), the financial institution that holds and manages the fund's

[37] The "5-Year High Quality Market Corporate Bond Par Yield" shown in **Exhibit 4** includes data on corporate bonds rated AAA, AA, or A.

[38] "Stable Value FAQ," *Stable Value Investment Association*, 2013. Accessed March 27, 2018, <https://stablevalue.org/media/misc/Stable_Value_FAQ.pdf>, pp. 1-3.

assets enters into so-called "wrap" contracts with one or more third-parties, who provide the "guarantee" feature.[39]

37. Wrap contracts are designed to enable stable value fund investors to be able to transact at the book value of their investments (which equals principal plus accumulated interest). This enables investors to receive the value of their principal plus accumulated interested even if the market value of the underlying portfolio declines in value.[40]

38. The rate of interest that investors accrue on their investments in a stable value fund is known as the "crediting rate." In the case of stable value funds that use wrap contracts to provide the "guarantee," the crediting rate is set on a periodic basis (*e.g.*, monthly or quarterly) in accordance with a formula stipulated in the wrap contracts.[41]

39. As referenced above, unlike the federal government's guarantee of investors' first $250,000 of credit union deposits, a stable value fund's "guarantee" generally comes with contractual limitations that increase the risk that an investor will suffer losses. For example, the United States Department of Treasury's Office of the Comptroller of the Currency has noted that:

> There are a few, limited instances when participants do not get book value from a stable value fund. These limited instances are typically defined in the contract. One such instance typically not covered is security defaults or downgrades. To protect the integrity of the stable value fund, most contracts incorporate investment guidelines establishing minimum credit

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[39] "Stable Value FAQ," *Stable Value Investment Association*, 2013. Accessed March 27, 2018, <https://stablevalue.org/media/misc/Stable_Value_FAQ.pdf>, pp. 1-2.

[40] "Advisory Council Report on Stable Value Funds and Retirement Security in the Current Economic Conditions," *United States Department of Labor*. Accessed February 2, 2018, <https://www.dol.gov/agencies/ebsa/about-ebsa/about-us/erisa-advisory-council/2009-stable-value-funds-and-retirement-security-in-the-current-economic-conditions>, p. 3.

[41] "Advisory Council Report on Stable Value Funds and Retirement Security in the Current Economic Conditions," *United States Department of Labor*. Accessed February 2, 2018, <https://www.dol.gov/agencies/ebsa/about-ebsa/about-us/erisa-advisory-council/2009-stable-value-funds-and-retirement-security-in-the-current-economic-conditions>, p. 9; "Stable Value Crediting Rates?" *Galliard Capital Management*, March 2015. Accessed May 8, 2018, <http://www.galliard.com/Publication-PDFs/Stable-Value-Crediting-Rates-March-2015.pdf>, p. 2.

> quality requirements for the underlying securities. These contracts have established mechanisms to address downgraded or defaulted securities that fall outside the contractual guidelines. Corporate-initiated events—which are employer-driven events, such as an early retirement program, layoff, or bankruptcy—are also typically not covered. Corporate-initiated events generally cause withdrawals en masse from a stable value fund. These withdrawals can negatively impact investors and plans that choose to remain in the fund.[42]

40. These risks are not just theoretical—indeed, some materialized in the years leading up to the Proposed Class Period. For example, during the late 2000s financial crisis,[43] participants investing in the stable value fund offered in the Chrysler LLC retirement plan received only $0.89 on the dollar after Chrysler declared bankruptcy.[44] Similarly, the stable value fund offered in the Lehman Brothers Holdings plan took a write down of 1.7% in December 2008, as insurers sold securities to meet the redemption requests of terminated employees.[45] Many other funds were at risk as well. For instance, a Department of Labor ("DOL") report based on testimony in 2009 from 18 witnesses representing a wide variety of interested parties and viewpoints, noted that the market

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[42] "Retirement Plan Products and Services," *Office of the Comptroller of the Currency*, Comptroller's Handbook AM-RPPS, Version 1.0, February 2014. Accessed April 2, 2018, <https://www.occ.treas.gov/publications/publications-by-type/comptrollers-handbook/retirement-plan-products-services/pub-ch-retirement-plan.pdf>, p. 34.

[43] The National Bureau of Economic Research classifies a recession (or contraction) as beginning at the peak of a business cycle and ending at the trough. The previous recession began in December 2007 when the business cycle reached its peak ("US Business Cycle Expansions and Contractions," *National Bureau of Economic Research*, September 20, 2010. Accessed March 9, 2018, <http://www.nber.org/cycles.html>).

[44] Doherty, J., "Don't Judge This Strategy by Its Name," *Barron's*, April 6, 2009. Accessed May 10, 2018, <https://www.barrons.com/articles/SB123880705647288919>. The article commentator stated, "In rare cases where plan contracts are prematurely terminated and insurance is discontinued, investors could receive the current market value of the assets, instead of book value, which is higher. A Chrysler fund that liquidated earlier this year paid employees and retirees only 89 cents on the dollar."

[45] Given American Airlines' own filing for Chapter 11 bankruptcy on November 29, 2011, and the issues that the airline industry was facing, generally, at the time, the plan sponsor bankruptcy exclusion is particularly pertinent here. *See* "Stable Value FAQ," *Stable Value Investment Association*, 2003. Accessed March 27, 2018, <https://stablevalue.org/media/misc/Stable_Value_FAQ.pdf>, p. 3; Laise, E., "'Stable' Funds in Your 401(k) May Not Be," *The Wall Street Journal*, March 26, 2009. Accessed May 10, 2018, <https://www.wsj.com/articles/SB123802645178842781>.

value of many stable value funds had fallen below their book value due to the economic turmoil experienced during the financial crisis.[46] If any of the contractual exclusions to wrap coverage applicable in these instances, investors in these funds could have lost money.

41. There are other ways stable value fund investors can lose money as well. Whereas the "guarantee" provided by a credit union is one backed by the full faith and credit of the United States government, a stable value fund's "guarantee" is only as good as the creditworthiness of the private company issuing it. But private companies that provide such guarantees can and do fail. For example, in the late 1980s and early 1990s, the failure of Executive Life Insurance Company, Confederation Life Insurance Company, and Mutual Benefit Life Insurance Company, put at risk the capital of investors holding guaranteed investment contracts issued by those companies.[47] Similarly, as explained by the Federal Reserve Bank of New York, prior to being bailed out by the federal government in 2008, AIG was the issuer of approximately $38 billion of stable value wrap contracts,[48] and had AIG not been rescued by the government "[w]orkers whose

[46] "Advisory Council Report on Stable Value Funds and Retirement Security in the Current Economic Conditions," *United States Department of Labor*. Accessed February 2, 2018, <https://www.dol.gov/agencies/ebsa/about-ebsa/about-us/erisa-advisory-council/2009-stable-value-funds-and-retirement-security-in-the-current-economic-conditions>, pp. 1, 5. Additionally, in 2005, the Trust Advisors Stable Value Plus Fund, managed by the Circle Trust Company, declared bankruptcy after imprudent investments caused the fund to sustain losses; eventually, investors were reimbursed for their balances in the fund at the time of bankruptcy (Rosen, J., "Just How Stable is 'Stable Value'?" *The New York Times*, October 8, 2006. Accessed May 10, 2018, <https://www.nytimes.com/2006/10/08/business/mutfund/08stable.html>).

[47] For example, *see* "Stable Value FAQ," *Stable Value Investment Association*, 2003. Accessed March 27, 2018, <https://stablevalue.org/media/misc/Stable_Value_FAQ.pdf>, p. 3; "GICs: As Safe as Seller is Stable," *Pensions & Investments*, October 19, 1998. Accessed May 10, 2018, <http://www.pionline.com/article/19981019/PRINT/810190730/gics-as-safe-as-seller-is-stable>.

[48] "The AIG Rescue, Its Impact On Markets, And The Government's Exit Strategy," *Congressional Oversight Panel*, June Oversight Report, June 10, 2010. Accessed February 15, 2018, <https://www.gpo.gov/fdsys/pkg/CPRT-111JPRT56698/pdf/CPRT-111JPRT56698.pdf>, p. 55.

401(k) plans had purchased guarantees in the form of [such] contracts … could have lost that insurance."[49]

42. The loss of that insurance could have resulted in participant losses had the funds been unable to obtain wrap coverage from another party, which was a particular concern at the time. For example, according to a 2009 study on stable value funds conducted by the DOL's ERISA Advisory Council, "recent developments in the Stable Value Fund market attributable to the recent economic turmoil include shrinking wrap contract capacity, increases in wrap fees, the emergence of a wrap issuer supply driven market, investment portfolio structure changes, tightened wrapper underwriting standards, fund credit uncertainty, and fund crediting rate divergence."[50] Similarly, a 2012 Vanguard article notes that during and after the financial crisis, "[c]losures of some stable value funds and capacity restrictions in others have introduced uncertainties to stable value as an option for defined contribution plan participants."[51] The article further states that "[h]igher fees for wrap insurance, constrained wrap availability, and more restrictive investment guidelines have furthermore led some plan sponsors to reassess their stable value offering."[52] A 2016 Vanguard study also notes that during and after the financial crisis, there was a "[l]imited capacity for stable value investment contracts as a number of wrap

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[49] "Actions Related to AIG," *Federal Reserve Bank of New York*. Accessed May 9, 2018, <https://www.newyorkfed.org/aboutthefed/aig>.

[50] "Advisory Council Report on Stable Value Funds and Retirement Security in the Current Economic Conditions," *United States Department of Labor*. Accessed February 2, 2018, <https://www.dol.gov/agencies/ebsa/about-ebsa/about-us/erisa-advisory-council/2009-stable-value-funds-and-retirement-security-in-the-current-economic-conditions>, p. 4.

[51] LaBarge, K., "Stable value funds: Considerations for plan sponsors," *Vanguard*, July 2012. Accessed April 2, 2018, <https://institutional.vanguard.com/iam/pdf/ICRSVF.pdf>, p. 2.

[52] LaBarge, K., "Stable value funds: Considerations for plan sponsors," *Vanguard*, July 2012. Accessed April 2, 2018, <https://institutional.vanguard.com/iam/pdf/ICRSVF.pdf>, p. 2.

issuers exited the stable value business."[53] In addition, "rising fees as the remaining issuers gained pricing power, and additional investment restrictions imposed by issuers presented significant challenges to both stable value managers and investors."[54, 55]

43. Consistent with industry practice, the investment disclosure documents for the MIP II and the AA Stable Value Fund acknowledge that, in some instances, participants may receive less than the book value of their investment balance. For example, the investment guide that I understand was provided to Plan participants states, with respect to the MIP II that "withdrawals prompted by certain events (e.g., layoffs, early retirement windows, spin-offs, sale of a division, facility closing, plan terminations, partial plan terminations, changes in laws or regulations) may be paid at the market value of the fund's securities, which may be less than your book value balance."[56] Similarly, a disclosure for the fund underlying the AA Stable Value Fund states that there is "no guarantee that the liquidity needs of all participants will be met" and, if liquidity buffers were inadequate, forced sales of securities could "cause a deviation between the Fund's market value and contract value."[57]

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[53] Dorfler, M., "Money market reform and stable value: Considerations for plan fiduciaries," *Vanguard*, August 2016. Accessed February 2, 2018, <https://personal.vanguard.com/pdf/ISGSVMM.pdf>, p. 4.

[54] Dorfler, M., "Money market reform and stable value: Considerations for plan fiduciaries," *Vanguard*, August 2016. Accessed February 2, 2018, <https://personal.vanguard.com/pdf/ISGSVMM.pdf>, p. 4.

[55] Despite the risks they present, even stable value funds do not consistently outpace inflation. For example, the one-year net returns as of September 30, 2017 of the Principal Stable Value Fund—a fund that I understand from Counsel that Plaintiffs have suggested as an alternative to the Credit Union Option—equaled 1.21% (compared to a 2.11% inflation rate that year). *See* "CPI-All Urban Consumers (Current Series)," *Bureau of Labor Statistics*, March 21, 2018. Accessed March 21, 2018; "Principal Stable Value Fund, Classic," Morley Capital Management, September 30, 2017. Accessed March 9, 2018, <https://advisors.principal.com/allweb/docs/RIS/investments/factsheet/PSVF.pdf>.

[56] American Airlines, Inc. 401(k) Plan / US Airways, Inc. Employee Savings Plan, "Time to learn: Investment Details Guide," October 2015, AA-APP121 – AA-APP172, at AA-APP149.

[57] "Wells Fargo Stable Value Fund W Collective Fund Disclosure," *Galliard Capital Management*, December 31, 2017. Accessed April 19, 2018, <http://www.galliard.com/_literature_180763/Stable_Value_Fund_W_Disclosure_Book>, p. 4.

44. In addition to exposing investors to greater risk of loss, stable value funds are also generally less liquid than demand deposit accounts. For example, via a contractual term known as an "equity wash" provision, stable value providers typically prohibit participants from transferring assets to "competing funds." "Competing funds" generally include short-term bond and money market funds, and may include other investment options as well.[58] For example, the AA Stable Value fund requires that, prior to moving assets from the fund to the Credit Union Option or to the Plan's brokerage account option, investors have to first exchange those assets into one of the other funds in the Plan's investment lineup, which are generally risker than capital preservation vehicles, for at least 90 days.[59]

45. Liquidity restrictions exist at the plan level as well and may restrict a fiduciary's ability to remove a stable value fund from a plan investment lineup even if the fiduciary thinks doing so is in the best interest of participants. For example, plan-level transactions[60] in stable value funds generally require at least 12 months of advance notice to the manager (referred to as a "put option").[61] Similarly, the DOL has noted that a plan withdrawing

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[58] For example, *see* "401(k) Plans: Certain Investment Options and Practices That May Restrict Withdrawals Not Widely Understood," *United States Government Accountability Office*, GAO-11-291, March 2011. Accessed April 2, 2018, <https://www.gao.gov/new.items/d11291.pdf>, pp. 11-12, 28 ("As part of the price of providing this [book value] guarantee, contract providers typically require certain restrictions on plan sponsor and participant withdrawals or transfers of plan assets from stable value funds.").

[59] American Airlines, Inc. 401(k) Plan / US Airways, Inc. Employee Savings Plan, "Re: Stable Value Investment Option Change," May 2017, p. 4; American Airlines, Inc. 401(k) Plan / US Airways, Inc. Employee Savings Plan, "Time to learn: Investment Details Guide," October 2015, AA-APP121 – AA-APP172, at AA-APP149.

[60] A plan-level transaction may include events such as layoffs, early retirement windows, and plan terminations, which may cause an outflow of plan assets. For example, *see* American Airlines, Inc. 401(k) Plan / US Airways, Inc. Employee Savings Plan, "Time to learn: Investment Details Guide," October 2015, AA-APP121 – AA-APP172, at AA-APP149; "MassMutual Guaranteed Interest Account," *MassMutual*, December 31, 2017. Accessed March 9, 2018, <https://wwwrs.massmutual.com/retire/pdffolder/rs4193.pdf>, p. 2.

[61] "Stable Value FAQ," *Stable Value Investment Association*, 2013. Accessed March 27, 2018, <https://stablevalue.org/media/misc/Stable_Value_FAQ.pdf>, p. 4.

from a stable value fund may need to choose between the put option and market value adjustment:

> For example, the Council received testimony that a plan withdrawing from a bank collective trust Stable Value Fund, when the market value is less than book value of the fund, commonly must choose between taking all of its funds at market value or waiting up to 12 months after serving notice of its intent to withdraw the funds (this commonly is referred to as exercising "a 12 month put"). During this 12 month period, the crediting rate on the funds is reduced so that at the end of the 12 month period, the market value and book value converge. This process assures principal preservation but results in a liquidity restriction. The Council also heard testimony that it is sometimes difficult for plan fiduciaries to obtain accurate market value information to be able to determine the ultimate cost of contract termination.[62]

46. Unlike stable value funds, the Credit Union Option is not subject to a put option that prevents Plan fiduciaries from removing it as a plan investment option. Nor is it subject to any equity wash restrictions. Indeed, I understand that there were no restrictions on withdrawals or transfers from the Credit Union Option beyond those that applied to the Plan as a whole.

2. Capital Preservation Options In The Plan

47. As described above, the Plan investment lineup included a demand deposit fund, the Credit Union Option, throughout the Proposed Class Period. A money market fund and a stable value fund, the Fidelity Institutional Money Market Fund and the MIP II respectively, were added in October 2015. In June 2017 the MIP II was replaced by the AA Stable Value Fund.

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[62] "Advisory Council Report on Stable Value Funds and Retirement Security in the Current Economic Conditions," *United States Department of Labor*. Accessed February 2, 2018, <https://www.dol.gov/agencies/ebsa/about-ebsa/about-us/erisa-advisory-council/2009-stable-value-funds-and-retirement-security-in-the-current-economic-conditions>, p. 5.

48. The Credit Union Option was widely held by Plan participants during the Proposed Class Period. As illustrated in **Exhibit 1A**, as of each year-end between 2010 and 2013, it was the most widely-held of the Plan's investment options in terms of assets invested, accounting for between \$1.1 billion and \$1.7 billion in Plan assets (equating to between 14.0% and 27.4% of Plan assets). In 2014 it was the second most widely-held option, after the S&P 500 Index Fund option, with \$1.1 billion in assets (equating to 12.0% of Plan assets).

49. The Credit Union Option remained widely-held after the Plan Merger, when the money market and stable value options were added as capital preservation alternatives. As illustrated in **Exhibit 5A**, between \$666 million and \$802 million in assets were invested in the Credit Union Option (between 6.2% and 11.3% of Plan assets) as of each quarter-end between Q4 2015 (the quarter of the Plan Merger) and Q1 2018,[63] compared to at most \$192 million in the stable value fund (2.1% of Plan assets) and \$56 million in the money market fund (0.8% of Plan assets) before its removal.[64]

50. Similarly, as shown in **Exhibit 5A**, between 77.7% and 89.4% of the Plan assets invested in capital preservation options were invested in the Credit Union Option as of each quarter-end between the end of 2015 and Q1 2018 (compared to between 6.1% and 6.3% for the money market option, and between 8.1% and 22.3% for the stable value option).

[63] I do not have data as of the end of Q1 2018, so I use data as of February 28, 2018 for that quarter.

[64] Although the Plan's overall investment in the Credit Union Option declined at the time of the Plan Merger, the decline was principally attributable to participants with balances in the Credit Union Option being moved to the separate and newly-created Pilot Plan. Taking into account both the Plan and the newly-created Pilot Plan, between \$1.0 billion and \$1.3 billion in assets were invested in the Credit Union Option, compared to at most \$388 million in the stable value fund and \$134 million in the money market fund before its removal.

51. Additionally, a high percentage of Plan participants invested in the Credit Union Option. As illustrated in **Exhibit 5B**, between 15.9% and 23.8% of Plan participants, and between 16,642 participants and 20,268 participants, invested in the Credit Union Option as of each quarter-end from Q4 2015 to Q1 2018 (compared to between 3.2% and 3.3% for the money market option, and between 3.6% and 6.1% for the stable value option). And looking only at the universe of participants who invested a portion of their assets in a capital preservation option during the same period, between 75.5% and 87.0% invested in the Credit Union Option (compared to between 11.3% and 12.3% for the money market option, and between 13.7% and 28.8% for the stable value option).

3. The Credit Union Option's Relative Performance

52. The Credit Union Option's returns exceeded the returns of similar investment products during the Proposed Class Period, including money market funds, as well as other banking, credit union, and general money market products.[65] **Exhibits 6** through **10**, compare the returns of the Credit Union Option to (a) average credit union interest rates on savings accounts, (b) average credit union interest rates on money market accounts (which are different from money market funds), (c) average bank interest rates on savings accounts, (d) average bank interest rates on money market accounts, and (e) average return on money market mutual funds over the 2010 to 2017 period.

53. In all cases, the Credit Union Option returns (averaging 0.56% on an annualized basis during the Proposed Class Period, with a high of 1.01% in 2010, and a low of 0.24% in 2013, 2014, and 2017) compared favorably to each of these comparison groups that I

[65] As I discuss above, money market funds are widely held in 401(k) plans including in plans that do not offer stable value products.

analyzed. As **Exhibits 6** through **10** show, the Credit Union Option's returns were higher than the returns of at least 78% of the options in each comparison, with the actual percentage varying across comparison group and year.

a. Credit Union Option vs. credit union savings accounts. Over the 2010 to 2017 period, the annual returns of the Credit Union Option exceeded the returns of 84% to 99% of credit union savings accounts analyzed (*see* **Exhibit 6**).[66] In other words, the Credit Union Option had higher returns than 84% to 99% of credit union savings accounts.

b. Credit Union Option vs. credit union money market accounts. The Credit Union Option's annual returns exceeded the returns of 78% to 99% of credit union money market accounts over the 2010 to 2017 period (*see* **Exhibit 7**).

c. Credit Union Option vs. bank savings accounts. The Credit Union Option's annual returns exceeded the returns of 83% to 99% of bank savings accounts over the 2010 to 2017 period (*see* **Exhibit 8**).

d. Credit Union Option vs. bank money market accounts. The Credit Union Option's annual returns exceeded the returns of 88% to 99% of bank money market accounts over the 2010 to 2017 period (*see* **Exhibit 9**).

e. Credit Union Option vs. Money Market Mutual Funds. The Credit Union Option's annual returns exceeded the returns of 85% to 99% of money market mutual fund accounts over the 2010 to 2017 period (*see* **Exhibit 10**). In fact, consistent with the results in **Exhibit 10**, the Credit Union Option's returns exceeded the returns of the Plan's money market fund, the Fidelity Institutional Money Market Fund, for seven of the eight years in the Proposed Class Period, including in 2015 and 2016, the years in which the money market fund was offered in the Plan. The Fidelity Institutional

[66] Plaintiffs claim that "the AA Federal Credit Union has an actual checking account option called a 'Priority' checking account that, according to the AA Federal Credit Union Internet site, is currently paying interest rates of up to 2.27%." Complaint, ¶ 20. While it is true that the Credit Union Option offers such a checking account with a 2.27% interest rate, Plaintiffs fail to consider that the 2.27% is the Annual Percent Yield ("APY") (as of May 1, 2018) that only applies to balances up to $5,000. Balances over $5,000 only earn dividends at a 0.05% APY ("Rate Disclosures – Checking," *American Airlines Credit Union*, 2018, Accessed May 10, 2018, <https://www.aacreditunion.org/wdg_disclosures.aspx>). A rate of 2.27% is far above the distribution of rates for savings accounts and money market accounts offered by credit unions, as reported in **Exhibits 6–7**. An analysis of Plan participant data illustrates that during the Proposed Class Period, 59.8% to 65.6% of Plan participants invested in the Credit Union Option had invested more than $5,000 therein. Over this time period, participants who invested in the Credit Union Option on average had invested $34,382 to $48,720 in the fund. Moreover, between 89.4% and 92.1% of assets invested in the Credit Union Option were above the $5,000 per participant threshold (*see* **Exhibit 11**). In **Exhibit 12**, I calculate the effective rate that the Plan would have been received had the Credit Union Option received a 2.27% rate on balances up to $5,000 and the prevailing APY on balances above $5,000. As this analysis shows, this effective rate was generally similar to or below the rate offered in the Credit Union Option, and the latter was often much higher. For example, as of December 2017, the effective rate would have been 0.24%, while the return on the Credit Union Option at that time was 0.94%.

Money Market Fund delivered average annualized returns of 0.24% from the beginning of Q3 2015 to the end of Q2 2016, the period for which it was in the Plan.

54. As the above analyses show, the returns to the Credit Union Option exceeded the returns of other demand deposit options and money market funds during the Proposed Class Period.

IV. THE NAMED PLAINTIFFS' INVESTMENT BEHAVIOR CONFLICTS WITH THEIR THEORY OF HARM

55. Plaintiffs' proposed class notice states, under the heading "What This Lawsuit Is About," that "Plaintiffs claim that Defendants violated the federal Employee Retirement Income Security Act of 1974 ('ERISA'), ***by imprudently failing to include a stable value fund either in place of or in addition to the American Airlines Credit Union Demand Deposit Option*** (the 'Credit Union Option') among the designated Investment alternatives offered by the Plan."[67] Accordingly, I assume Plaintiffs' theory is that a stable value option should have been added to the Plan earlier, along with the Credit Union Option.

56. Plaintiffs contend that stable value funds are superior to the Credit Union Option because they have provided higher returns than the Credit Union Option while allegedly exposing investors to comparable risk.[68] Plaintiffs thus purport to claim as damages "the difference between what the Plan participants actually earned on the [Credit Union Option] and what they would have earned had the funds been invested in a stable value fund instead."[69]

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[67] Plaintiff's Proposed Class Notice, APPX11 – APPX18, at APPX12. (Emphasis added.)

[68] Complaint, ¶ 25.

[69] "Plaintiffs' Memorandum of Law in Support of Motion for Class Certification," *Salvadora Ortiz and Thomas Scott v. American Airlines, Inc., The American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union*, April 23, 2018 ("Memorandum in Support of Motion for Class Certification"), p. 8.

57. This measure of damages assumes that, had a stable value fund been added to the Plan's lineup earlier, either instead of or in addition to the Credit Union Option, participants would have reallocated the entirety of their investments in the Credit Union Option to that stable value fund.

58. That assumption, however, is directly contradicted by the investment choices made by Named Plaintiffs, Ms. Ortiz and Mr. Scott. Based on my review of Named Plaintiffs' transaction activity, neither Ms. Ortiz nor Mr. Scott allocated any portion of their accounts to the Plan's stable value option after it was added to the Plan's investment lineup.

59. As of the beginning of the Proposed Class Period, Ms. Ortiz held $16,859 in the Credit Union Option.[70] When a stable value fund was added to the Plan's investment lineup in October 2015, Ms. Ortiz had approximately $23,000 invested in the Credit Union Option and kept her investments in the Credit Union Option until she left the Plan in August 2016, six months after filing the present lawsuit.[71] At no time did she invest in the Plan's stable value options.

60. At the beginning of the Proposed Class Period, Mr. Scott held $368,591 in the Credit Union Option, but reduced his balance throughout the Proposed Class Period.[72] By the time the money market and stable value options were added to the Plan in October 2015,

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[70] "American Airlines Retirement and Stock Plans – Salvadora P. Ortiz," *J.P. Morgan Retirement Plan Services and Empower Retirement*, January 1, 2010–December 31, 2015.

[71] "Retirement Savings Statement, American Airlines, Inc. 401(k) Plan – Salvadora Ortiz," *Fidelity Investments*, October 28–June 23, 2015; "Ortiz trans history thru 08-05-2016.xlsx."

[72] "American Airlines Retirement and Stock Plans – Thomas W. Scott," *J.P. Morgan Retirement Plan Services and Empower Retirement*, January 1, 2010–December 31, 2015.

his balance in the Credit Union Option was only $55.80.[73] At that time, he transferred his $55.80 in Credit Union Option investments (together with over $32,000 from other Plan investment options) to the money market option.[74] He did not move any assets into the newly-offered stable value option, nor has he done so any time since then.[75] But in September 2016, months after the filing of this lawsuit and a week prior to the previously-announced removal of the money market option from the Plan's investment lineup, he reallocated his remaining balance in the money market option (approximately $300) back to the Credit Union Option.[76] The following month, Mr. Scott again transferred his balance in the Credit Union Option, this time to the US Small/Mid Cap Stock Fund.[77] Since that time, he has not allocated any portion of his account to either of the Plan's capital preservation options. Rather, as of April 4, 2018, his account was allocated among the brokerage account option, the US Small/Mid Cap Stock Fund, and the US Large Cap Value Stock Fund.[78] Like Ms. Ortiz, at no time did he invest in the Plan's stable value option.[79]

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[73] "Retirement Savings Statement, American Airlines, Inc. 401(k) Plan – Thomas Scott," *Fidelity Investments*, October 28–June 23, 2015, p. 2; "Scott trans history thru 04-04-2018.xlsx."

[74] "Retirement Savings Statement, American Airlines, Inc. 401(k) Plan – Thomas Scott," *Fidelity Investments*, October 29–June 23, 2015, pp. 2, 3.

[75] "Scott trans history thru 04-04-2018.xlsx."

[76] "Scott trans history thru 04-04-2018.xlsx."

[77] "Scott trans history thru 04-04-2018.xlsx."

[78] "Scott trans history thru 04-04-2018.xlsx."

[79] I understand that, in addition to investing directly in the Credit Union Option, Mr. Scott claims to have indirectly invested in the Credit Union Option by investing in the Plan's Moderate Pre-Mixed and Conservative Pre-Mixed portfolios prior to the Plan Merger (Memorandum in Support of Motion for Class Certification, p. 9). However, Plaintiffs provide no support for the assertion that those pre-mixed portfolios invested in the Credit Union Option, and I understand that was not in fact the case during the Proposed Class Period, as indicated by the Plan's quarterly performance reports provided to the PAAC. "American Airlines Employee Benefit Plans, 1st Quarter 2010," *American Beacon Advisors*, June 3, 2010, AA-MAIN-000000146 – AA-MAIN-000000179, at AA-MAIN-000000163; "American Airlines Employee Benefit Plans, 2nd Quarter 2015," *American Beacon Advisors*, August 21, 2015, AA-MAIN-000000513 – AA-MAIN-000000534, at AA-MAIN-000000532.

61. Named Plaintiffs' failure to invest in the stable value option after it was added to the Plan's investment lineup—and, in Mr. Scott's case, his affirmative move to other capital preservation options during that time period—strongly suggests that they would not have invested in the stable value option had it been included earlier. Thus, contrary to Plaintiffs' theory of harm, the investments of Named Plaintiffs themselves were not affected by the availability of a stable value fund and Named Plaintiffs were not harmed by the alleged failure to offer a stable value fund earlier.

V. NAMED PLAINTIFFS' INVESTMENT DECISIONS ARE NOT TYPICAL OF THE CLASS AS A WHOLE

62. As shown above, many other participants made similar choices to Named Plaintiffs in choosing not to invest in the stable value funds. However, Named Plaintiffs' investment decisions in this respect are not typical of the decisions available to, or made by, all other participants in the Proposed Class. For example, 1,859 Proposed Class Members withdrew their accounts from the Plan in 2014, before the stable value option was added to the Plan's investment lineup. Thus, unlike the Named Plaintiffs, those participants never declined the opportunity to allocate their accounts to the stable value option, and thus are not subject to the inference that they would have declined the stable value option had the option been afforded earlier. In contrast, 2,061 Proposed Class Members, unlike the Named Plaintiffs, only participated in the Plan after the stable value option was added to the Plan's investment lineup and thus had the ability to allocate their accounts to that option throughout the time period that they had Plan accounts.[80]

[80] This includes 760 participants who joined the Plan for the first time following the Plan Merger and 1,301 participants who were previously in the US Airways plan (*See* **Exhibit 14**). It only includes participants who held the Credit Union Option at some point during the Proposed Class Period.

63. Given the choice between the Credit Union Option and a stable value option, new participants predominantly favored the Credit Union Option. **Exhibit 13** presents data only on those participants who joined the Plan after the Plan Merger.[81] The dollar amounts in this exhibit represent the total balances in each of the Plan's capital preservation options for new participants in the first quarter they invested in the Plan. As the exhibit illustrates, even among participants who were new to the Plan, the majority of their capital preservation investments (80.4%) went into the Credit Union Option, with 17.1% going into one of the stable value options and 2.6% going into the money market option.[82] The affirmative decisions by these participants to invest in the Credit Union Option when given the freedom to choose between the Credit Union Option and a stable value option contradict Plaintiffs' assumption that, given the same choice, participants would uniformly allocate the portion of their accounts earmarked for capital preservation to the stable value option. Furthermore, regardless of how they allocated their Plan accounts, there is no reasonable basis to conclude that Proposed Class Members who joined the Plan after the Plan Merger were ever harmed by the absence of a stable value option in the Plan's investment lineup prior to when they joined the Plan. This is because a stable value option was in the Plan lineup during the entire time that they were invested in the Plan.

64. There are other examples of variation among participants:

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[81] This exhibit does not include participants who joined the Plan from the US Airways plan. Additionally, to the extent some of the participants whose investments are reported in **Exhibit 13** never invested in the Credit Union Option, they would not be part of the Proposed Class. However, the investment decisions of these participants are still instructive.

[82] The exhibit also shows that 84.9% of new participants invested in the Credit Union Option during their first quarter in the Plan, while only 21.5% of new participants invested in a stable value option, for a total of $7.1 million in the Credit Union Option and $1.5 million in a stable value option.

a. There were 339 former US Airways employees who were invested in the stable value fund in October 2015, prior to the Plan Merger, that later invested in the Credit Union Option after joining the Plan. Additionally, 931 former US Airways employees who were not in the stable value fund prior to the Plan Merger also invested in the Credit Union Option after joining the Plan.[83] These Proposed Class Members affirmatively chose to invest in the Credit Union Option when it became available to them, even though a stable value fund had been available to them prior to as well as after the Plan Merger.

b. Unlike Named Plaintiffs, there are 2,965 Proposed Class Members who invested in the Credit Union Option before the stable value option was added to the Plan investment lineup and at some point reallocated a portion of their Plan accounts to the stable value option thus demonstrating some preference for that option.[84] Of these Proposed Class Members, however, 720 retained some balance in the Credit Union Option as of the last date they held assets in the Plan, indicating that they did not prefer the stable value option to the exclusion of the Credit Union Option.[85] Further, as I address below, some Proposed Class Members transferred assets to the stable value option from options that had provided greater investment returns than the stable value option, suggesting that they may have received lower returns on their Plan accounts had a stable value fund been added to the Plan's investment lineup earlier and resulted in similar reallocations.

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[83] American Airlines Plan Participant Data.

[84] American Airlines Plan Participant Data. In addition, there are 1,607 Proposed Class Members who were invested in the Credit Union Option prior to the Plan Merger, moved into the Pilot Plan, and then reallocated a portion of their Pilot Plan accounts to the stable value option. American Airlines Plan Participant Data (*see* **Exhibit 14**).

[85] American Airlines Plan Participant Data.

c. Finally, like Named Plaintiffs, 31,605 Proposed Class Members who participated in the Plan both before and after a stable value option was added to the Plan investment lineup declined to invest in that option (*see* **Exhibit 14** for a breakdown of Proposed Class Members). **Exhibit 5A** shows that at no point after its introduction, through February 2018, did the stable value option have more than $192 million. Additionally, until its removal from the Plan in Q2 2016, the Fidelity Institutional Money Market Fund had no more than $56 million in assets, or 6.3% of assets held in capital preservation options. In contrast, the exhibit shows that the Credit Union Option never had less than 77.7% of that total and had between $666 and $802 million of assets. In other words, when a stable value fund was available in the Plan, participants still held around three times more assets in the Credit Union Option than in the stable value option. Moreover, **Exhibit 5B** shows that even after stable value and money market options were available alongside the Credit Union Option, between 16,642 and 20,268 participants held assets in the Credit Union Option and the percentage of participants with at least some assets invested in the Credit Union Option never dropped below 75.5%. In contrast, between 3,086 and 6,355 participants, and no more than 28.8% of Plan participants, invested in the stable value option.[86]

65. As with Named Plaintiffs, the decisions by numerous other participants not to invest in the stable value option and to continue investing in the Credit Union Option when given

[86] Some participants are recorded as having small amounts of each investment. If holdings of less than $10 are excluded, after the stable value option was added between 16,032 and 19,342 participants held the Credit Union Options, between 2,676 and 2,723 participants held the Fidelity Institutional Money Market Fund, and between 3,037 and 6,238 participants held the Stable Value Option.

the choice between the two, contradicts an assumption that participants would uniformly favor a stable value option over the Credit Union Option.

66. Whether particular participants who declined to invest in the stable value option once it was added would have nonetheless done so had it been added earlier can only be determined on a participant-by-participant basis. It is possible, for example, that some participants' financial circumstances and priorities changed over time such that the likelihood that they would have utilized a stable value option in the years before the Plan Merger differed from the likelihood after the Plan Merger. However, such changes could only be determined by analyzing each individual participant's financial circumstances and investment priorities and how those circumstances and priorities changed over time.

VI. A THEORY CONTEMPLATING THE REMOVAL OF THE CREDIT UNION OPTION FROM THE PLAN WOULD NOT AVOID THE NEED FOR INDIVIDUALIZED INQUIRY

67. I understand that Plaintiffs have at times suggested that their theory is that the Credit Union Option should have been removed from the Plan's investment lineup at the beginning of the Proposed Class Period and that participants should have been denied the choice of investing in that option at all.[87] This theory is at odds with industry practice. For example, while the survey by MetLife that Plaintiffs rely on in their Complaint indicates that the majority of surveyed 401(k) plans offered a stable value fund in their investment lineups,[88] that same survey also indicated that 62% of surveyed plans included a money market fund in their investment lineups, either instead of or in addition

[87] Complaint, ¶ 41.

[88] Complaint, ¶ 16.

to a stable value fund.[89] This is corroborated by other sources, as shown in **Exhibit 3**. For example, as mentioned above, surveys of Vanguard-recordkept plans with over 5,000 participants found that between 66% and 77% of such plans offered a money market fund over the 2011 to 2016 period.[90]

68. The prevalence of these plans demonstrates that many plan fiduciaries believe that it is reasonable and appropriate to include capital preservation options other than stable value in their plan's lineup (whether or not a stable value fund was also offered). Were the Credit Union Option to be removed from the Plan, it would be inconsistent with the decisions of the fiduciaries' in those surveyed plans.

69. While these surveyed plans offered money market funds and not credit union funds, as shown above, the Credit Union Option generally provided higher returns than money market funds during the Proposed Class Period. Furthermore, the Credit Union Option also provided the security of a federal government guarantee that money market funds do not generally offer. Thus, the Proposed Class Members who invested in the Credit Union Option during the Proposed Class Period are better off than they would have been had they invested in a typical money market fund. Furthermore, as discussed above, the *Federal Credit Union Act* requires credit unions to serve groups having a common bond of occupation or association, or groups within a well-defined, local neighborhood, community, or rural district. Therefore, not all plans would be able to offer such an option.

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[89] *MetLife*, "2015 Stable Value Study: A Survey of Plan Sponsors, Stable Value Fund Providers and Advisors," 2015. Accessed January 24, 2018, <https://www.metlife.com/content/dam/microsites/institutional-retirement/pdf/2015_StableValueStudy.pdf>, p. 5.

[90] *See* **Exhibit 3**.

A. Individualized Inquiry Would Be Necessary To Determine Whether Proposed Class Members Were Harmed Under A Theory That The Credit Union Option Is An Imprudent Plan Investment Option

70. Framing Plaintiffs' theory as a challenge to the continued offering of the Credit Union Option (rather than a theory that a stable value option should have been offered alongside the Credit Union Option) does not avoid the need for individualized inquiry into whether the Proposed Class Members were harmed by the availability of the Credit Union Option as an investment choice. Plaintiffs have asserted that "damages could properly be calculated as the difference between what Plan participants received from the [Credit Union Option] and what they would have received had the Plan instead included a more prudent and loyal capital preservation option, such as a stable value fund."[91]

71. This theory also assumes that had the Credit Union Fund been replaced with a stable value fund, all Proposed Class Members would have uniformly viewed this alternative capital preservation option as superior to the Credit Union Option but not superior to any other investments, and thus, would have invested the same amounts in the stable value option as they did in the Credit Union Option without making any other changes to the allocation of their Plan accounts. There is, however, no basis to conclude that participants would have done so on a class-wide basis, and, in fact, there are indications to the contrary. For example, as illustrated in **Exhibit 15**, when the Fidelity Institutional Money Market Fund was removed from the Plan in Q3 2016, nearly 90% of participants allowed their investments in the fund to be transferred by default to the Plan's target date fund options. Additionally, 2.1% of participants affirmatively decided to transfer their assets to the Credit Union Option, while 1.0% of participants moved their assets to the Plan's

[91] Memorandum in Support of Motion for Class Certification, p. 19.

stable value option, the MIP II. The remaining participants moved their assets into various other Plan options, as the exhibit shows. Participants did not uniformly move their investments into the stable value option.

72. Furthermore, when the stable value option was added to the Plan investment lineup, some Proposed Class Members transferred assets to that option, not from the lower-returning Credit Union Option, but from other options in the lineup representing investment categories that had, in retrospect, generated higher returns than stable value funds. This not only indicates that some participants may have been worse off had a stable value option been made available at an earlier date, but also illustrates the disparate investment preferences and behavior of participants.[92] For example:

a. Participant AA_SSN_000051818 transferred $61,048 from the Target Date 2040 Fund into the MIP II in Q1 2016.[93]

b. Participant AA_SSN_000036414 transferred $31,006 from the US Small/Mid Cap Stock Fund into the MIP II in Q2 2016.

c. Participant AA_SSN_000009961 transferred $32,687 from the International Stock Fund into the MIP II in Q3 2016.

d. Participant AA_SSN_000020908 transferred $9,774 from the Inflation Protection Fund into the MIP II in Q4 2016.

e. Participant AA_SSN_000090202 transferred $96,319 from the US Bond Index Fund into the MIP II in Q1 2017.

[92] While I do not have the returns for all Plan investment options for the entire Proposed Class Period, the stock market was generally expansionary from 2016 to the present. For example, according to data from Morningstar, the S&P 500 grew by 12.0% in 2016 and by 21.8% in 2017. In contrast, the stable value option had returns of 1.73% in 2016 and of 1.86% in 2017. As the AA Stable Value Fund replaced the MIP II on June 30, 2017, I calculated these returns using the MIP II returns from the start of 2016 until the end of June 2017 and the AA Stable Value Fund returns for the remainder of 2017 using data from Morningstar.

[93] In the American Airlines Plan Participant Data the social security numbers are anonymized and are used to refer to individual participants in the Plan. The five participants who are used as examples all held the Credit Union Option during the Proposed Class Period and held the AA Stable Value Fund as of the end of the Proposed Class Period.

73. As these data show, individualized inquiry is required to determine whether or how a given participant's investment behavior was affected by the lack of a stable value offering, and that even among participants that did move some of their assets into the stable value fund from other options, individualized inquiry would still be necessary to determine whether such a reallocation (if made earlier based on the hypothetical earlier availability of a stable value option) would have left them better or worse off.[94]

B. To the Extent The Plaintiffs Contend That The Credit Union Option Is An Improper Plan Investment Option With Or Without a Stable Value Alternative, The Named Plaintiffs Are Not Representative Of The Preferences Of Other Proposed Class Members

74. To the extent the Plaintiffs contend that the Credit Union Option is an improper Plan investment even when offered alongside a stable value fund, the Named Plaintiffs are not representative of the interests of other Proposed Class Members.

75. Removing the Credit Union Option would not have any obvious effect on either of the Named Plaintiffs. Ms. Ortiz no longer has an account balance and so would be unaffected by any changes to the Plan's investment lineup.[95] While Mr. Scott does have a Plan account, his account is no longer invested in any capital preservation option but is instead allocated among the brokerage account option, the US Small/Mid Cap Stock Fund, and the US Large Cap Value Stock Fund.[96]

[94] There may also be participants who diversified their portfolio by balancing the risks and expected returns of the Credit Union Option with other investment options. The removal of the Credit Union Option from such an investor's portfolio might then require rebalancing the entire portfolio to arrive at a similar risk/return trade off. In such an instance, replacing the Credit Union Option with an alternative capital preservation option could cause a participant the change his or her allocation to multiple investments.

[95] "Ortiz trans history thru 08-05-2016.xlsx." Ms. Ortiz transferred her balance to an IRA account in Q3 2016. *See* "Disbursement History – Salvadora Ortiz," *Fidelity Investments*, August 5, 2016 and September 13, 2016.

[96] "Scott trans history thru 04-04-2018.xlsx."

76. On the other hand, removing the Credit Union Option would effectively annul the investment decisions of those Proposed Class Members who currently invest in the Credit Union Option and restrict their ability to control their retirement savings going forward. As of February 28, 2018, 16,642 participants had a total of over $650 million invested in the Credit Union Option despite the availability of a stable value option.[97] Eliminating the Credit Union Option would deny those participants the ability to continue to invest in an option that each of them affirmatively elected and force them to accept allocation strategies that have been available to them but which they implicitly rejected by investing in the Credit Union Option.

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[97] *See* **Exhibits 5A** and **5B**.

My work in this matter is ongoing, and I may review additional materials or conduct further analysis. To the extent that additional information comes to my attention, I reserve the right to update, refine, and/or revise my opinions.

Francis A. Longstaff, Ph. D., CPA, CFA
MAY 11, 2018

Exhibit 1A

Exhibit 1A

American Airlines $uper $aver 401(k) Plan
Invested Assets by Investment Option
Old Plan Lineup
Year-End 2010 - 2014

Investment Option	Share Class	2010		2011		2012		2013		2014	
		Assets ($ millions)	% of Plan Assets	Assets ($ millions)	% of Plan Assets	Assets ($ millions)	% of Plan Assets	Assets ($ millions)	% of Plan Assets	Assets ($ millions)	% of Plan Assets
Capital Preservation Options											
Credit Union Option	N/A	1,255	18.3%	1,695	27.4%	1,260	19.0%	1,145	14.0%	1,060	12.0%
Sub Total – Capital Preservation Options		**1,255**	**18.3%**	**1,695**	**27.4%**	**1,260**	**19.0%**	**1,145**	**14.0%**	**1,060**	**12.0%**
Other Fixed Income Options											
American Beacon Short-Term Bond Fund	Inst	101	1.5%	85	1.4%	139	2.1%	99	1.2%	292	3.3%
American Beacon Intermediate Bond Fund	Inst	205	3.0%	474	7.7%	305	4.6%	265	3.2%	317	3.6%
American Beacon High Yield Bond Fund	AMR	31	0.5%	24	0.4%	32	0.5%	34	0.4%	33	0.4%
American Beacon Treasury Inflation Protected Securities	Instl	76	1.1%	133	2.1%	113	1.7%	61	0.7%	55	0.6%
Fidelity U.S. Bond Index Fund[5]	Inst[10]	202	2.9%	-	-	-	-	-	-	-	-
Fidelity U.S. Bond Index Fund[5]	Advantage[10]	-	-	261	4.2%	297	4.5%	294	3.6%	386	4.4%
T. Rowe Price High Yield Fund	Investor	63	0.9%	36	0.6%	114	1.7%	59	0.7%	60	0.7%
Sub Total – Other Fixed Income Options		**678**	**9.9%**	**1,013**	**16.4%**	**1,000**	**15.1%**	**812**	**9.9%**	**1,143**	**12.9%**
Equity Options											
American Beacon Emerging Markets Fund	AMR	81	1.2%	43	0.7%	47	0.7%	49	0.6%	48	0.5%
American Beacon International Equity Fund	AMR	256	3.7%	191	3.1%	232	3.5%	280	3.4%	244	2.8%
American Beacon International Equity Index Fund	Inst	256	3.7%	215	3.5%	375	5.6%	494	6.0%	410	4.6%
American Beacon Large Cap Growth Fund[2]	AMR	52	0.8%	46	0.7%	-	-	-	-	-	-
American Beacon Large Cap Value Fund	AMR	532	7.8%	477	7.7%	498	7.5%	640	7.8%	733	8.3%
American Beacon Mid-Cap Value Fund	AMR	28	0.4%	22	0.4%	33	0.5%	57	0.7%	58	0.7%
American Beacon S&P 500 Index Fund	Inst	378	5.5%	402	6.5%	594	8.9%	902	11.0%	1,230	13.9%
American Beacon Small Cap Index Fund	Inst	91	1.3%	39	0.6%	182	2.7%	281	3.4%	142	1.6%
American Beacon Small Cap Value Fund	AMR	391	5.7%	309	5.0%	273	4.1%	495	6.0%	330	3.7%
Dodge & Cox Stock Fund	Rtl	267	3.9%	214	3.5%	294	4.4%	425	5.2%	736	8.3%
Dreyfus Emerging Markets Fund	I	109	1.6%	53	0.9%	75	1.1%	48	0.6%	53	0.6%
Dreyfus Midcap Value Fund[3]	A[8]	528	7.7%	170	2.7%	322	4.8%	-	-	-	-
Dreyfus Midcap Value Fund[3]	I[8]	-	-	-	-	-	-	515	6.3%	293	3.3%
Fidelity Diversified International Fund	Rtl	154	2.2%	107	1.7%	109	1.6%	126	1.5%	118	1.3%
Fidelity Puritan Fund	Rtl	41	0.6%	37	0.6%	45	0.7%	51	0.6%	110	1.2%
Janus Fund	I	88	1.3%	66	1.1%	71	1.1%	82	1.0%	373	4.2%
MFS Growth Fund[4]	R4	-	-	-	-	50	0.8%	193	2.4%	96	1.1%

Exhibit 1A

American Airlines $uper $aver 401(k) Plan
Invested Assets by Investment Option
Old Plan Lineup
Year-End 2010 - 2014

Investment Option	Share Class	2010 Assets ($ millions)	2010 % of Plan Assets	2011 Assets ($ millions)	2011 % of Plan Assets	2012 Assets ($ millions)	2012 % of Plan Assets	2013 Assets ($ millions)	2013 % of Plan Assets	2014 Assets ($ millions)	2014 % of Plan Assets
Perkins Small Cap Value Fund	L[9]	166	2.4%	-	-	-	-	-	-	-	-
Perkins Small Cap Value Fund	I[9]	-	-	128	2.1%	122	1.8%	140	1.7%	146	1.6%
T. Rowe Price Mid-Cap Growth Fund	Investor	444	6.5%	204	3.3%	180	2.7%	226	2.8%	258	2.9%
T. Rowe Price New Horizons Fund	Investor	318	4.6%	123	2.0%	108	1.6%	163	2.0%	130	1.5%
T. Rowe Price Science & Technology Fund	Investor	155	2.3%	50	0.8%	39	0.6%	62	0.8%	76	0.9%
Sub Total – Equity Options		**4,335**	**63.3%**	**2,896**	**46.8%**	**3,649**	**54.9%**	**5,229**	**63.7%**	**5,584**	**63.0%**
Balanced Options											
American Beacon Balanced Fund	AMR	234	3.4%	239	3.9%	250	3.8%	301	3.7%	327	3.7%
Sub Total – Balanced Options		**234**	**3.4%**	**239**	**3.9%**	**250**	**3.8%**	**301**	**3.7%**	**327**	**3.7%**
Other Investment Options											
Company Stock[6]	N/A	3	0.0%	-	-	-	-	-	-	-	-
Pre-Mixed Portfolios	N/A	337	4.9%	288	4.7%	392	5.9%	579	7.1%	572	6.5%
Self-directed Brokerage Account[7]	N/A	8	0.1%	61	1.0%	92	1.4%	137	1.7%	176	2.0%
Sub Total – Other Investment Options		**348**	**5.1%**	**349**	**5.6%**	**484**	**7.3%**	**716**	**8.7%**	**748**	**8.4%**
Total Invested Assets		**$6,850**		**$6,192**		**$6,643**		**$8,203**		**$8,862**	
Number of Options		**30**		**29**		**29**		**29**		**29**	

Notes:
[1] Data are as of year-end.
[2] The American Beacon Large Cap Growth Fund was liquidated in Q1 2012
[3] The Dreyfus MidCap Value Fund was listed under a different name, Dreyfus Opportunistic Midcap Value Fund, starting in 2011 Q1
[4] The MFS Growth Fund was added to the plan in Q2 2012.
[5] The Fidelity U.S. Bond Index Fund was listed under a different name, Spartan U.S. Bond Index Fund, starting in 2011 Q1
[6] The Company Stock was frozen by the Plan's independent Fiduciary in November 2011 and participant balances were transferred to the Qualified Default Investment Alternative in December 201
[7] The Self-directed Brokerage Account was added to the plan in Q4 2010
[8] The share class for Dreyfus Midcap Value Fund changed from A to I effective April 26, 2013 (Q2 2013)
[9] The share class for Perkins Small Cap Value Fund changed from L to I on July 30, 2010 (Q3 2010), but the Q3 2010 and Q4 2010 quarterly reports did not reflect this change. The new share class was reflected beginning in the Q1 2011 report.
[10] Assets for Fidelity U.S. Bond Index Fund were transferred to the newly created Advantage share class effective May 30, 2011 (Q2 2011

Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 Q1 – 2014 Q4; SEC Summary Prospectuses

Exhibit 1B

Exhibit 1B

American Airlines $uper $aver 401(k) Plan
Invested Assets by Investment Option
New Plan Lineup
Year-End 2015 - 2017

	2015		2016		2017	
Investment Option	**Assets ($ millions)**	**% of Plan Assets**	**Assets ($ millions)**	**% of Plan Assets**	**Assets ($ millions)**	**% of Plan Assets**
Capital Preservation Options						
Credit Union Option	769	11.3%	802	9.2%	685	6.5%
Fidelity Institutional Money Market Fund	56	0.8%	-	-	-	-
MIP II Class 3	72	1.1%	184	2.1%	-	-
AA Stable Value Fund	-	-	-	-	175	1.6%
Sub Total – Capital Preservation Options	**898**	**13.2%**	**986**	**11.3%**	**859**	**8.1%**
Other Fixed Income Options						
Diversified Bond Fund	59	0.9%	86	1.0%	121	1.1%
Inflation Protection Fund	41	0.6%	63	0.7%	67	0.6%
US Bond Index	460	6.8%	498	5.7%	550	5.2%
Sub Total – Other Fixed Income Options	**561**	**8.3%**	**646**	**7.4%**	**738**	**7.0%**
Equity Options						
Emerging Markets Stock Index Fund	93	1.4%	155	1.8%	299	2.8%
International Developed Markets Stock	344	5.1%	470	5.4%	671	6.3%
International Stock Fund	67	1.0%	69	0.8%	98	0.9%
US Large Cap Growth Stock Fund	233	3.4%	155	1.8%	319	3.0%
US Large Cap Value Stock Fund	125	1.8%	207	2.4%	224	2.1%
US Large Cap Stock Index	784	11.6%	957	11.0%	1,259	11.9%
US Small/Mid Cap Stock Fund	121	1.8%	159	1.8%	177	1.7%
US Small/Mid Cap Stock Index	383	5.6%	522	6.0%	616	5.8%
Sub Total – Equity Options	**2,149**	**31.7%**	**2,693**	**30.9%**	**3,662**	**34.6%**

Exhibit 1B

American Airlines $uper $aver 401(k) Plan
Invested Assets by Investment Option
New Plan Lineup
Year-End 2015 - 2017

	2015		2016		2017	
Investment Option	**Assets ($ millions)**	**% of Plan Assets**	**Assets ($ millions)**	**% of Plan Assets**	**Assets ($ millions)**	**% of Plan Assets**
Balanced Options						
Target Date Post Retirement	199	2.9%	223	2.6%	226	2.1%
Target Date 2015	210	3.1%	281	3.2%	293	2.8%
Target Date 2020	545	8.0%	775	8.9%	873	8.3%
Target Date 2025	765	11.3%	1,107	12.7%	1,342	12.7%
Target Date 2030	671	9.9%	894	10.3%	1,123	10.6%
Target Date 2035	299	4.4%	372	4.3%	480	4.5%
Target Date 2040	127	1.9%	166	1.9%	223	2.1%
Target Date 2045	55	0.8%	80	0.9%	116	1.1%
Target Date 2050	29	0.4%	53	0.6%	80	0.8%
Target Date 2055	12	0.2%	26	0.3%	50	0.5%
Target Date 2060	10	0.2%	18	0.2%	25	0.2%
Sub Total – Balanced Options	**2,921**	**43.1%**	**3,994**	**45.9%**	**4,832**	**45.7%**
Other Investment Options						
Company Stock	1	0.0%	2	0.0%	2	0.0%
Self-directed Brokerage Account	251	3.7%	387	4.4%	485	4.6%
Sub Total – Other Investment Options	**252**	**3.7%**	**389**	**4.5%**	**486**	**4.6%**
Total Invested Assets	**$6,781**		**$8,709**		**$10,577**	
Number of Options	**27**		**26**		**26**	

Note:
[1] Data are as of year-end.

Source:
American Airlines Plan Participant Data.

Exhibit 2A

Exhibit 2A

Ibbotson Indices Performance

1926 - 2009

Index	Average Annual Return	Standard Deviation of Annual Returns	Percentage of Years with Negative Returns	Percentage of Years in Which Returns Were Below Inflation[1]
Ibbotson US 30 Day T-Bill Index	3.71%	3.08%	1.2%	35.7%
Ibbotson US Intermediate Treasury Index	5.48%	5.72%	10.7%	39.3%
Ibbotson US Long-Term Treasury Index	5.83%	9.58%	26.2%	39.3%
Ibbotson US Long-Term Corporate Index	6.15%	8.33%	20.2%	33.3%
Ibbotson US Small Stock Index	16.57%	32.79%	31.0%	31.0%
Ibbotson US Large Stock Index	11.85%	20.51%	28.6%	32.1%

Note:

[1] Ibbotson Inflation Index is used as a measure of inflation.

Source:

Morningstar Direct.

Exhibit 2B

Exhibit 2B

Ibbotson Indices Performance

2010 - 2017

Index	Average Annual Return	Standard Deviation of Annual Returns	Percentage of Years with Negative Returns	Percentage of Years in Which Returns Were Below Inflation[1]
Ibbotson US 30 Day T-Bill Index	0.16%	0.27%	0.0%	100.0%
Ibbotson US Intermediate Treasury Index	2.78%	3.80%	12.5%	50.0%
Ibbotson US Long-Term Treasury Index	7.49%	13.18%	25.0%	37.5%
Ibbotson US Long-Term Corporate Index	8.65%	8.76%	25.0%	25.0%
Ibbotson US Small Stock Index	15.93%	17.42%	25.0%	25.0%
Ibbotson US Large Stock Index	14.30%	10.06%	0.0%	12.5%

Note:

[1] Ibbotson Inflation Index is used as a measure of inflation.

Source:

Morningstar Direct.

Exhibit 2C

Exhibit 2C

Ibbotson Indices Performance

1926 - 2017

Index	Average Annual Return	Standard Deviation of Annual Returns	Percentage of Years with Negative Returns	Percentage of Years in Which Returns Were Below Inflation[1]
Ibbotson US 30 Day T-Bill Index	3.40%	3.11%	1.1%	41.3%
Ibbotson US Intermediate Treasury Index	5.24%	5.61%	10.9%	40.2%
Ibbotson US Long-Term Treasury Index	5.97%	9.86%	26.1%	39.1%
Ibbotson US Long-Term Corporate Index	6.37%	8.35%	20.7%	32.6%
Ibbotson US Small Stock Index	16.52%	31.69%	30.4%	30.4%
Ibbotson US Large Stock Index	12.06%	19.80%	26.1%	30.4%

Note:

[1] Ibbotson Inflation Index is used as a measure of inflation.

Source:

Morningstar Direct.

Exhibit 3

Exhibit 3

Percentage of 401(k) Plans Offering Stable Value and Money Market Funds

2010 - 2017

Survey	2010	2011	2012	2013	2014	2015	2016	2017
Deloitte Annual Defined Contribution Benchmarking Survey[1]								
Stable Value	85%	73%		77%		76%		76%
Money Market	62%	53%		57%		59%		59%
MetLife Stable Value Study								
Stable Value						82%		83%
Money Market						62%		52%
Both Stable Value and Money Market						45%		36%
Stable Value Only						38%		46%
Money Market Only						18%		16%
Vanguard: How America Saves (All Plans)[1]								
Stable Value		58%	58%	58%	57%	57%	63%	
Money Market		70%	70%	71%	71%	72%	67%	
Vanguard: How America Saves (Plans with 5,000 + Participants)[1]								
Stable Value		61%	61%	60%	57%	58%	65%	
Money Market		66%	69%	73%	73%	77%	73%	

Note:

[1] GICs are included in the totals for Stable Value.

Sources:

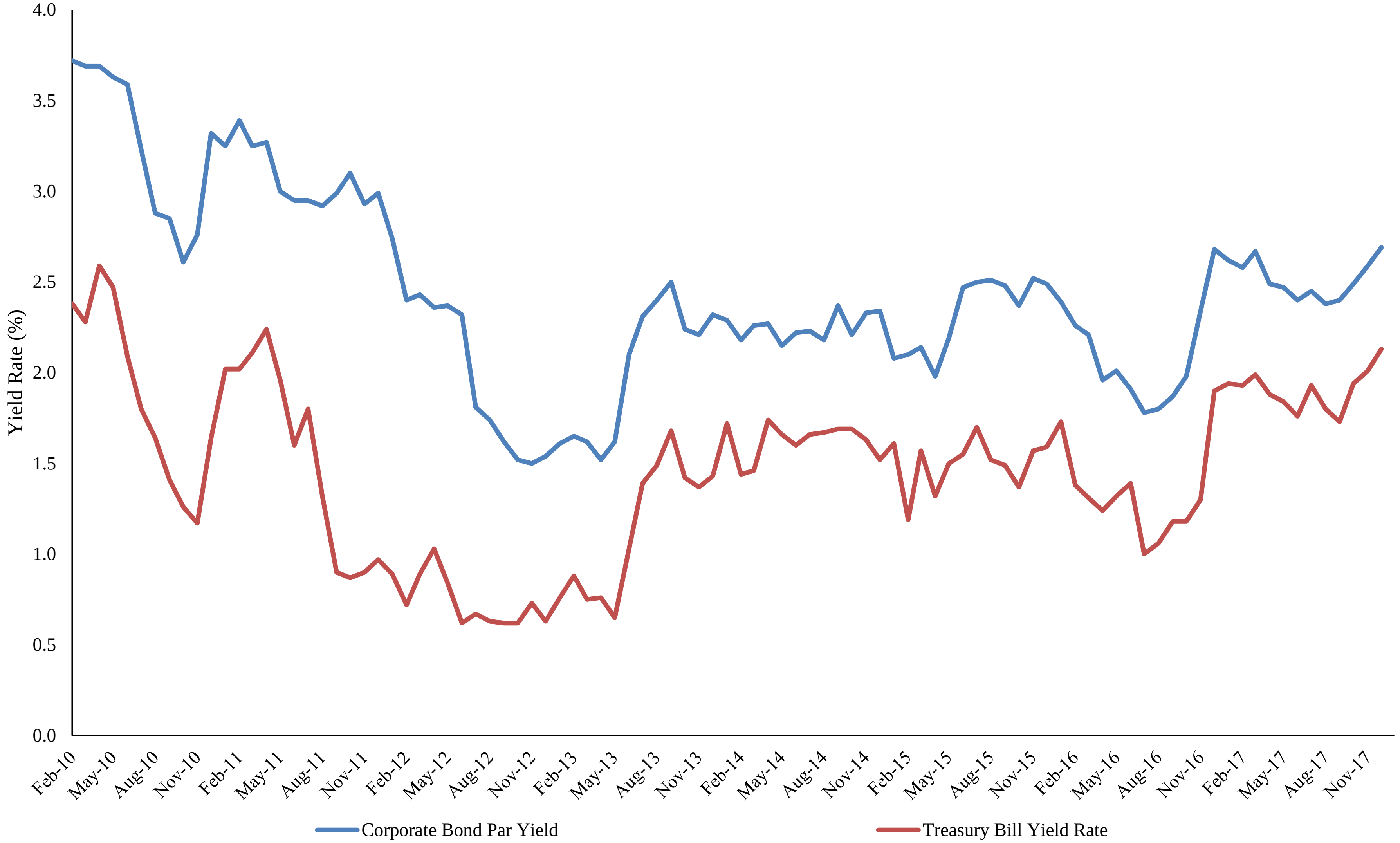
Deloitte Annual Defined Contribution Benchmarking Survey (2010, 2011, 2013, 2015, 2017); MetLife Stable Value Study (2015, 2017); Vanguard: How America Saves (2012-2017).

Exhibit 4

Exhibit 4

5-Year Treasury Bill Yield Curve Rate v. 5-Year High Quality Market Corporate Bond Par Yield

February 1, 2010 - December 1, 2017



Note:

[1] According to the Federal Reserve Economic Data website, High Quality Market Corporate Bonds include "data from a set of high quality corporate bonds rated AAA, AA, or A that accurately represent the high quality corporate bond market."

Sources:

Federal Reserve Economic Data, "10-Year High Quality Market (HQM) Corporate Bond Par Yield;" US Treasury.

Exhibit 5A

Exhibit 5A

Assets (in $ Millions) Invested in Capital Preservation

December 31, 2015 - February 28, 2018

Fund	12/31/2015	3/31/2016	6/30/2016	9/30/2016	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	2/28/2018
Credit Union Option	$769	$767	$763	$767	$802	$736	$713	$767	$685	$666
Fidelity Institutional Money Market Fund[1]	$56	$56	$56	-	-	-	-	-	-	-
Stable Value Options[2]	$72	$94	$88	$91	$184	$192	$188	$186	$175	$191
Capital Preservation Total	$898	$916	$907	$858	$986	$927	$901	$953	$859	$857
Plan Total	$6,781	$6,861	$7,017	$7,359	$8,709	$9,259	$9,655	$10,107	$10,577	$10,694
Percentage of Plan Assets in:										
Credit Union Option	11.3%	11.2%	10.9%	10.4%	9.2%	7.9%	7.4%	7.6%	6.5%	6.2%
Money Market Fund	0.8%	0.8%	0.8%	-	-	-	-	-	-	-
Stable Value Options	1.1%	1.4%	1.3%	1.2%	2.1%	2.1%	1.9%	1.8%	1.6%	1.8%
Percentage of Assets in Capital Preservation	13.2%	13.4%	12.9%	11.7%	11.3%	10.0%	9.3%	9.4%	8.1%	8.0%
Percentage of Assets in Capital Preservation in:										
Credit Union Option	85.7%	83.7%	84.1%	89.4%	81.3%	79.3%	79.1%	80.5%	79.7%	77.7%
Money Market Fund	6.3%	6.1%	6.2%	-	-	-	-	-	-	-
Stable Value Options	8.1%	10.2%	9.7%	10.6%	18.7%	20.7%	20.9%	19.5%	20.3%	22.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes:

[1] The Fidelity Institutional Money Market Fund was removed from the Plan after Q2 2016.

[2] The stable value option in the Plan changed from the MIP II to the American Airlines Stable Value Fund (which invested in the Wells Fargo Stable Value Fund W, a stable value commingled pool managed by Galliard) on June 30, 2017.

Source:

American Airlines Plan Participant Data.

Exhibit 5B

Exhibit 5B

Participants Invested in Capital Preservation

December 31, 2015 - February 28, 2018

Fund	12/31/2015	3/31/2016	6/30/2016	9/30/2016	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	2/28/2018
Credit Union Option	18,369	20,268	18,842	18,457	19,535	17,853	17,387	17,998	16,885	16,642
Fidelity Institutional Money Market Fund[1]	2,759	2,811	2,780	-	-	-	-	-	-	-
Stable Value Options[2]	3,086	3,978	3,643	3,618	5,867	5,869	5,890	5,808	5,740	6,355
Capital Preservation Total	22,498	24,954	23,206	21,207	23,947	22,637	22,268	22,845	21,715	22,031
Plan Total	86,132	85,073	85,668	85,934	102,879	103,424	104,019	104,547	104,632	104,649
Percentage of Plan Participants in:										
Credit Union Option	21.3%	23.8%	22.0%	21.5%	19.0%	17.3%	16.7%	17.2%	16.1%	15.9%
Money Market Fund	3.2%	3.3%	3.2%	-	-	-	-	-	-	-
Stable Value Options	3.6%	4.7%	4.3%	4.2%	5.7%	5.7%	5.7%	5.6%	5.5%	6.1%
Percentage of Participants in Capital Preservation	26.1%	29.3%	27.1%	24.7%	23.3%	21.9%	21.4%	21.9%	20.8%	21.1%
Percentage of Participants in Capital Preservation in:										
Credit Union Option	81.6%	81.2%	81.2%	87.0%	81.6%	78.9%	78.1%	78.8%	77.8%	75.5%
Money Market Fund	12.3%	11.3%	12.0%	-	-	-	-	-	-	-
Stable Value Options	13.7%	15.9%	15.7%	17.1%	24.5%	25.9%	26.5%	25.4%	26.4%	28.8%

Notes:

[1] The Fidelity Institutional Money Market Fund was removed from the Plan after Q2 2016.

[2] The stable value option in the Plan changed from the MIP II to the American Airlines Stable Value Fund (which invested in the Wells Fargo Stable Value Fund W, a stable value commingled pool managed by Galliard) on June 30, 2017.

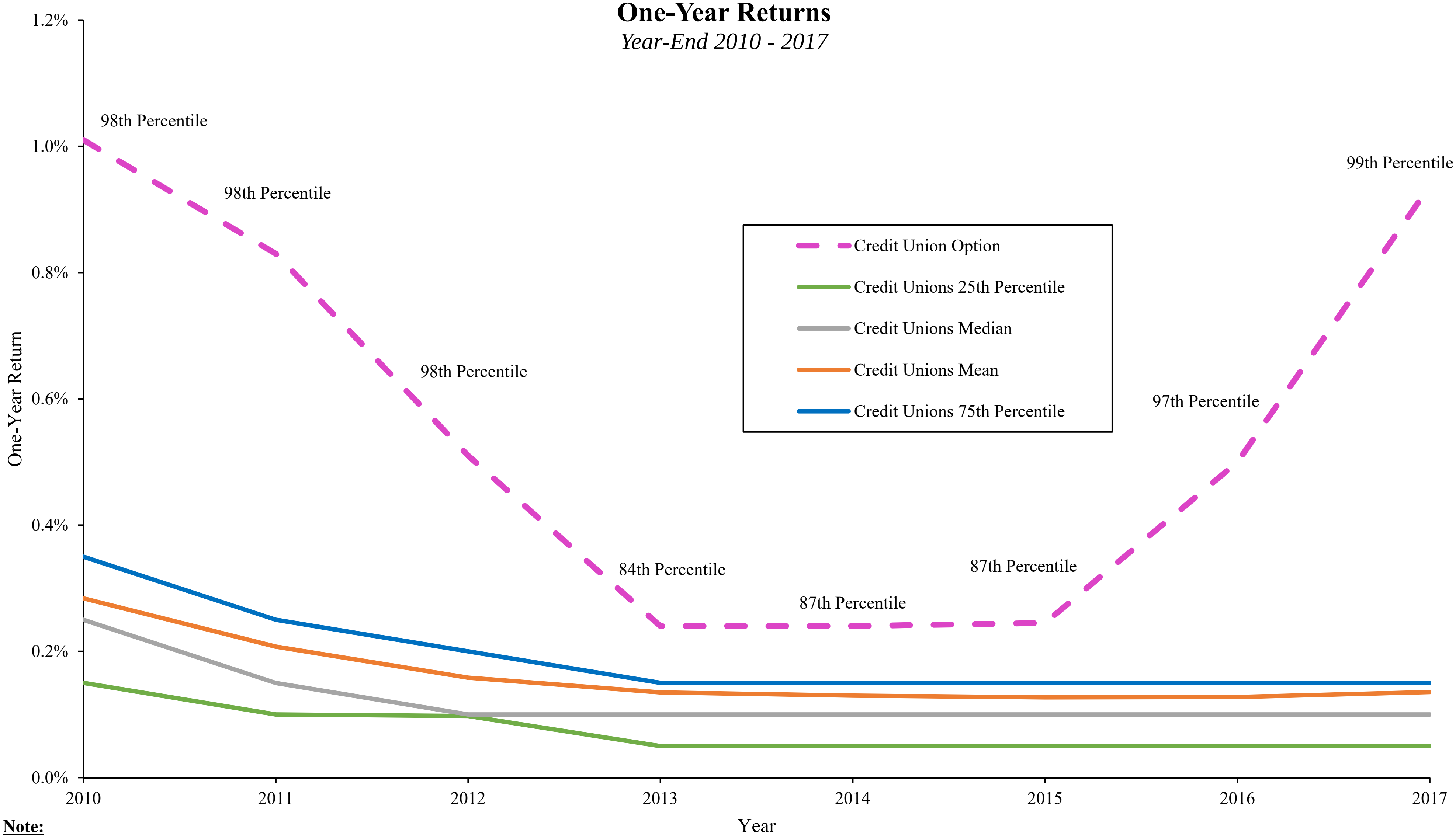
Source:

American Airlines Plan Participant Data.

Exhibit 6A

Exhibit 6A

Credit Union Option vs. Savings Accounts for Credit Unions
One-Year Returns
Year-End 2010 - 2017



Note:
[1] This analysis uses data from S&P Global Market Intelligence, a commonly referenced source of data on the financial industry. The data cover 19,246 banks (with designations of "Commercial Bank," "Savings Bank," or "Savings & Loan Association") and 13,096 credit unions over the relevant period. The data include both operating and acquired/defunct companies.
Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; S&P Global Market Intelligence.

Exhibit 6B

Exhibit 6B

Credit Union Option vs. Savings Accounts for Credit Unions
One-Year Returns
Year-End 2010 - 2017

	Credit Union Option		Savings Accounts for Credit Unions			
Year	**Return**	**Percentile Rank**	**25th Percentile**	**Median**	**Mean**	**75th Percentile**
2010	1.01%	98th Percentile	0.15%	0.25%	0.28%	0.36%
2011	0.83%	98th Percentile	0.10%	0.15%	0.21%	0.25%
2012	0.51%	98th Percentile	0.10%	0.10%	0.16%	0.20%
2013	0.24%	84th Percentile	0.05%	0.10%	0.13%	0.15%
2014	0.24%	87th Percentile	0.05%	0.10%	0.13%	0.15%
2015	0.25%	87th Percentile	0.05%	0.10%	0.13%	0.15%
2016	0.50%	97th Percentile	0.05%	0.10%	0.13%	0.15%
2017	0.94%	99th Percentile	0.05%	0.10%	0.14%	0.15%

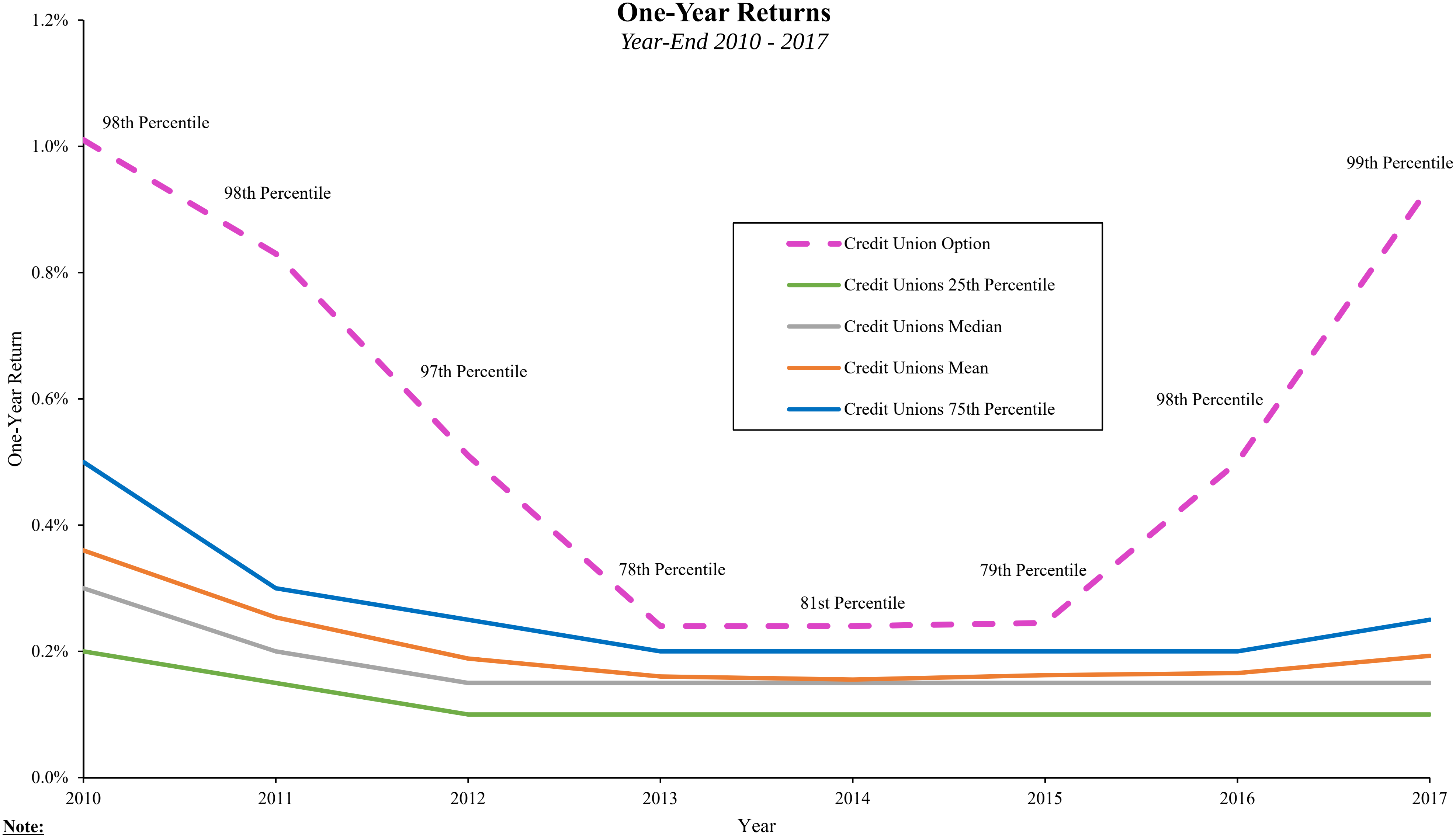
Note:
[1] This analysis uses data from S&P Global Market Intelligence, a commonly referenced source of data on the financial industry. The data cover 19,246 banks (with designations of “Commercial Bank,” “Savings Bank,” or “Savings & Loan Association”) and 13,096 credit unions over the relevant period. The data include both operating and acquired/defunct companies.

Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; S&P Global Market Intelligence.

Exhibit 7A

Exhibit 7A

Credit Union Option vs. Money Market Accounts for Credit Unions
One-Year Returns
Year-End 2010 - 2017



Note:
[1] This analysis uses data from S&P Global Market Intelligence, a commonly referenced source of data on the financial industry. The data cover 19,246 banks (with designations of "Commercial Bank," "Savings Bank," or "Savings & Loan Association") and 13,096 credit unions over the relevant period. The data include both operating and acquired/defunct companies.
Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; S&P Global Market Intelligence.

Exhibit 7B

Exhibit 7B

Credit Union Option vs. Money Market Accounts for Credit Unions
One-Year Returns
Year-End 2010 - 2017

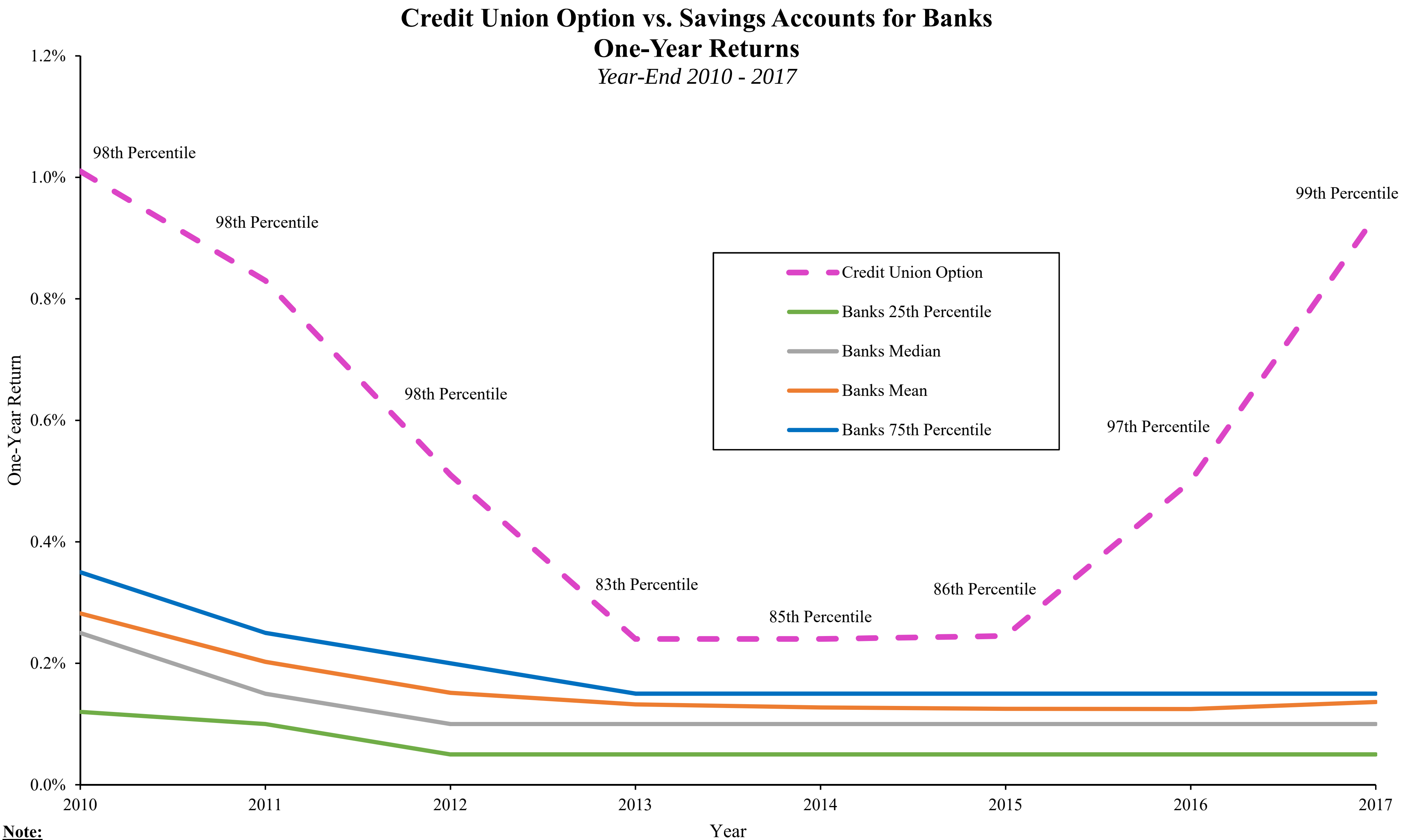
	Credit Union Option		Money Market Accounts for Credit Unions			
Year	**Return**	**Percentile Rank**	**25th Percentile**	**Median**	**Mean**	**75th Percentile**
2010	1.01%	98th Percentile	0.20%	0.30%	0.36%	0.50%
2011	0.83%	98th Percentile	0.15%	0.20%	0.25%	0.30%
2012	0.51%	97th Percentile	0.10%	0.15%	0.19%	0.25%
2013	0.24%	78th Percentile	0.10%	0.15%	0.16%	0.20%
2014	0.24%	81st Percentile	0.10%	0.15%	0.16%	0.20%
2015	0.25%	79th Percentile	0.10%	0.15%	0.16%	0.20%
2016	0.50%	98th Percentile	0.10%	0.15%	0.17%	0.20%
2017	0.94%	99th Percentile	0.10%	0.15%	0.19%	0.25%

Note:
[1] This analysis uses data from S&P Global Market Intelligence, a commonly referenced source of data on the financial industry. The data cover 19,246 banks (with designations of "Commercial Bank," "Savings Bank," or "Savings & Loan Association") and 13,096 credit unions over the relevant period. The data include both operating and acquired/defunct companies.

Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; S&P Global Market Intelligence.

Exhibit 8A

Exhibit 8A



Note:
[1] This analysis uses data from S&P Global Market Intelligence, a commonly referenced source of data on the financial industry. The data cover 19,246 banks (with designations of "Commercial Bank," "Savings Bank," or "Savings & Loan Association") and 13,096 credit unions over the relevant period. The data include both operating and acquired/defunct companies.

Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; S&P Global Market Intelligence.

Exhibit 8B

Exhibit 8B

Credit Union Option vs. Savings Accounts for Banks
One-Year Returns
Year-End 2010 - 2017

	Credit Union Option		Savings Accounts for Banks			
Year	**Return**	**Percentile Rank**	**25th Percentile**	**Median**	**Mean**	**75th Percentile**
2010	1.01%	98th Percentile	0.12%	0.25%	0.28%	0.35%
2011	0.83%	98th Percentile	0.10%	0.15%	0.20%	0.25%
2012	0.51%	98th Percentile	0.05%	0.10%	0.15%	0.20%
2013	0.24%	83th Percentile	0.05%	0.10%	0.13%	0.15%
2014	0.24%	85th Percentile	0.05%	0.10%	0.13%	0.15%
2015	0.25%	86th Percentile	0.05%	0.10%	0.13%	0.15%
2016	0.50%	97th Percentile	0.05%	0.10%	0.12%	0.15%
2017	0.94%	99th Percentile	0.05%	0.10%	0.14%	0.15%

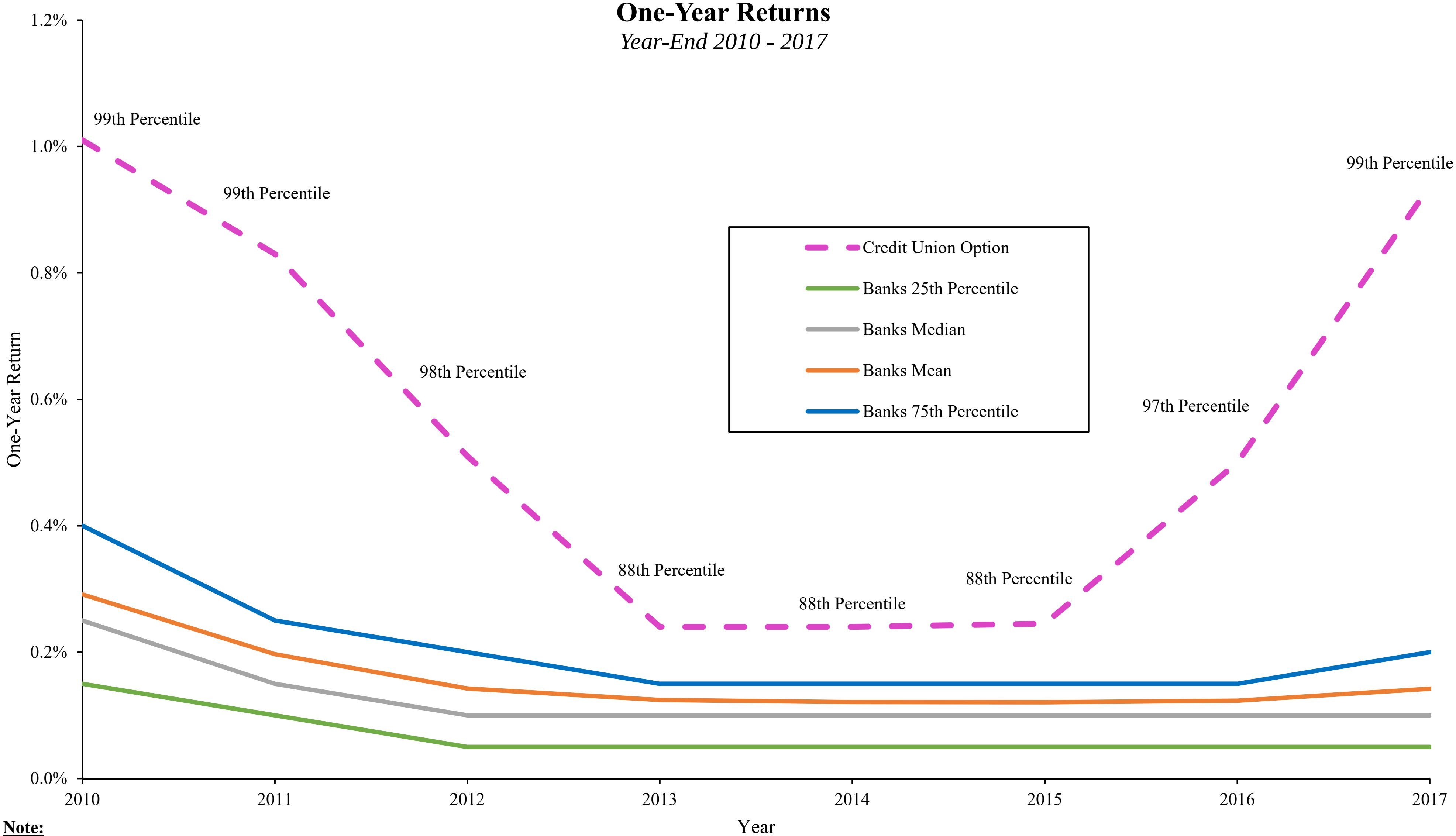
Note:
[1] This analysis uses data from S&P Global Market Intelligence, a commonly referenced source of data on the financial industry. The data cover 19,246 banks (with designations of “Commercial Bank,” “Savings Bank,” or “Savings & Loan Association”) and 13,096 credit unions over the relevant period. The data include both operating and acquired/defunct companies.

Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; S&P Global Market Intelligence.

Exhibit 9A

Exhibit 9A

Credit Union Option vs. Money Market Accounts for Banks
One-Year Returns
Year-End 2010 - 2017



Note:
[1] This analysis uses data from S&P Global Market Intelligence, a commonly referenced source of data on the financial industry. The data cover 19,246 banks (with designations of "Commercial Bank," "Savings Bank," or "Savings & Loan Association") and 13,096 credit unions over the relevant period. The data include both operating and acquired/defunct companies.

Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; S&P Global Market Intelligence.

Exhibit 9B

Exhibit 9B

Credit Union Option vs. Money Market Accounts for Banks
One-Year Returns
Year-End 2010 - 2017

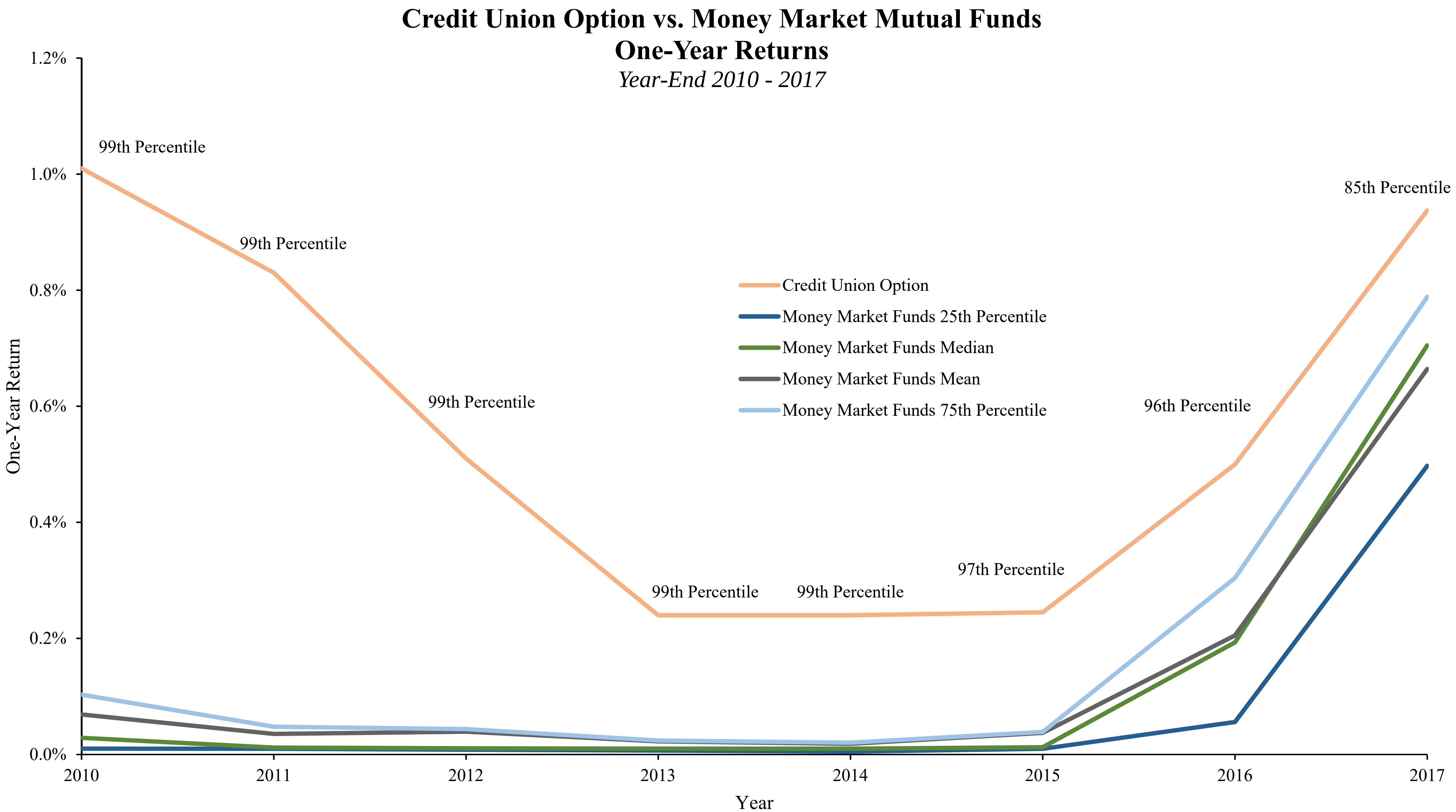
	Credit Union Option		Money Market Accounts for Banks			
Year	**Return**	**Percentile Rank**	**25th Percentile**	**Median**	**Mean**	**75th Percentile**
2010	1.01%	99th Percentile	0.15%	0.25%	0.29%	0.40%
2011	0.83%	99th Percentile	0.10%	0.15%	0.20%	0.25%
2012	0.51%	98th Percentile	0.05%	0.10%	0.14%	0.20%
2013	0.24%	88th Percentile	0.05%	0.10%	0.12%	0.15%
2014	0.24%	88th Percentile	0.05%	0.10%	0.12%	0.15%
2015	0.25%	88th Percentile	0.05%	0.10%	0.12%	0.15%
2016	0.50%	97th Percentile	0.05%	0.10%	0.12%	0.15%
2017	0.94%	99th Percentile	0.05%	0.10%	0.14%	0.20%

Note:
[1] This analysis uses data from S&P Global Market Intelligence, a commonly referenced source of data on the financial industry. The data cover 19,246 banks (with designations of "Commercial Bank," "Savings Bank," or "Savings & Loan Association") and 13,096 credit unions over the relevant period. The data include both operating and acquired/defunct companies.

Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; S&P Global Market Intelligence.

Exhibit 10A

Exhibit 10A



Note:
[1] For each year, all mutual funds in the Lipper for Investment Management database with twelve month of returns and a U.S. Mutual Fund Classification Code of Institutional Money Market Funds, Institutional U.S. Government Money Market Funds, Institutional U.S. Treasury Money Market Funds, Money Market Instrument Funds, U.S. Government Money Market Funds, U.S. Treasury Money Market Fund, Institutional Tax-Exempt Money Market Funds, or Tax-Exempt Money Market Funds are included in this analysis. For each money market fund, the highest returning share class each year is used.

Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; Lipper for Investment Management.

Exhibit 10B

Exhibit 10B

Credit Union Option vs. Money Market Mutual Funds
One-Year Returns
Year-End 2010 - 2017

	Credit Union Option		Money Market Funds			
Year	**Return**	**Percentile Rank**	**25th Percentile**	**Median**	**Mean**	**75th Percentile**
2010	1.01%	99th Percentile	0.01%	0.03%	0.07%	0.10%
2011	0.83%	99th Percentile	0.01%	0.01%	0.04%	0.05%
2012	0.51%	99th Percentile	0.01%	0.01%	0.04%	0.04%
2013	0.24%	99th Percentile	0.01%	0.01%	0.02%	0.02%
2014	0.24%	99th Percentile	0.01%	0.01%	0.02%	0.02%
2015	0.25%	97th Percentile	0.01%	0.01%	0.04%	0.04%
2016	0.50%	96th Percentile	0.06%	0.19%	0.21%	0.30%
2017	0.94%	85th Percentile	0.50%	0.70%	0.66%	0.79%

Note:
[1] For each year, all mutual funds in the Lipper for Investment Management database with twelve month of returns and a U.S. Mutual Fund Classification Code of Institutional Money Market Funds, Institutional U.S. Government Money Market Funds, Institutional U.S. Treasury Money Market Funds, Money Market Instrument Funds, U.S. Government Money Market Funds, U.S. Treasury Money Market Fund, Institutional Tax-Exempt Money Market Funds, or Tax-Exempt Money Market Funds are included in this analysis. For each money market fund, the highest returning share class each year is used.

Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; Lipper for Investment Management.

Exhibit 11

Exhibit 11

Summary of Assets in Credit Union Option
Assets over $5,000 Priority Limit

Year-End 2010 - 2017

Year	Assets in Credit Union Option	Assets Over $5,000 Limit	Percentage of Assets Over $5,000 Limit	Participants In Credit Union Option	Participants With Excess	Percentage of Participants with Some Excess	Average Balance in Credit Union Option
2010	$1,255,308,660	$1,121,654,961	89.4%	36,511	22,062	60.4%	$34,382
2011	$1,695,159,828	$1,560,893,584	92.1%	34,794	23,032	66.2%	$48,720
2012	$1,259,885,678	$1,147,094,357	91.0%	30,538	18,780	61.5%	$41,256
2013	$1,145,443,114	$1,045,663,153	91.3%	26,269	16,665	63.4%	$43,604
2014	$1,059,795,166	$969,170,830	91.4%	23,713	15,310	64.6%	$44,693
2015	$769,083,595	$699,703,796	91.0%	18,369	11,824	64.4%	$41,869
2016	$802,374,073	$729,536,935	90.9%	19,535	12,802	65.5%	$41,074
2017	$684,756,349	$624,893,467	91.3%	16,885	10,249	60.7%	$40,554

Sources:

American Airlines Plan Participant Data; “Rate Disclosures – Checking,” American Airlines Credit Union, 2018, Accessed April 5, 2018, <https://www.aacreditunion.org/wdg_disclosures.aspx>.

Exhibit 12

Exhibit 12

Summary of Assets in Credit Union Option
Blended Rate Based on Assets Over and Under $5,000 Priority Checking Limit
Year-End 2010 - 2017

Year	Assets in Credit Union Option	Assets Over $5,000 Limit	Percentage of Assets Over $5,000 Limit	Percentage of Assets Under $5,000 Limit	Return for Assets Over $5,000 Limit[1]	Return for Assets Under $5,000 Limit[1]	AA Credit Union Priority Checking Account Blended Rate[2]	Credit Union Option Return for Plan Participants[3]	Difference
2010	$1,255,308,660	$1,121,654,961	89.4%	10.6%	0.05%	2.53%	0.31%	1.01%	0.70%
2011	$1,695,159,828	$1,560,893,584	92.1%	7.9%	0.05%	2.53%	0.25%	0.83%	0.58%
2012	$1,259,885,678	$1,147,094,357	91.0%	9.0%	0.05%	2.27%	0.25%	0.51%	0.26%
2013	$1,145,443,114	$1,045,663,153	91.3%	8.7%	0.05%	2.27%	0.24%	0.24%	0.00%
2014	$1,059,795,166	$969,170,830	91.4%	8.6%	0.05%	2.27%	0.24%	0.24%	0.00%
2015	$769,083,595	$699,703,796	91.0%	9.0%	0.05%	2.27%	0.25%	0.25%	-0.01%
2016	$802,374,073	$729,536,935	90.9%	9.1%	0.05%	2.27%	0.25%	0.50%	0.25%
2017	$684,756,349	$624,893,467	91.3%	8.7%	0.05%	2.27%	0.24%	0.94%	0.69%

Notes:

[1] The returns for assets over and under the $5,000 limit are obtained using the Wayback Machine for <http://www.aacreditunion.org:80/wdg_disclosures.aspx>, for the closest available date prior to the end of each year.

[2] The AA Credit Union Priority Checking Account Blended Rate is calculated using each participant's Credit Union Option balance. The formula is:
((Return for Assets Under $5,000 Limit)*(Percentage of Assets Under $5,000 Limit) + (Return for Assets Over $5,000 Limit)*(Percentage of Assets Over $5,000 Limit)) /
(Total Assets invested in the Credit Union Option in the Plan).

[3] Credit Union Option Return for Plan Participants is taken from the Quarterly Reports for 2010 - June 2015, and from 401k Dividend Rate - Jun '15 to Mar '18.xlsx for July 2015 - 2017.

Sources:

American Airlines Plan Participant Data; "Rate Disclosures – Checking," American Airlines Credit Union, 2018, <https://www.aacreditunion.org/wdg_disclosures.aspx>; Internet Archive Wayback Machine <https://web.archive.org/>; American Airlines Plan Quarterly Reports; 401k Dividend Rate - Jun '15 to Mar '18.xlsx.

Exhibit 13

Exhibit 13

Investments in Capital Preservation Options
Participants who Joined the Plan after the Merger
Participant's First Quarter in the Plan[1]

Option	Assets	Count of Participants
Credit Union Option	$7,070,255	640
Fidelity Institutional Money Market Fund	$224,360	66
Stable Value Options[2]	$1,503,096	162
Capital Preservation Total	$8,797,711	754
Plan Total	$64,765,133	13,543
Percentage Invested in Capital Preservation	13.6%	5.6%
Percentage Invested in Capital Preservation that are in:		
Credit Union Option	80.4%	84.9%
Money Market Fund	2.6%	8.8%
Stable Value Options	17.1%	21.5%

Notes:

[1] A participant's first quarter in the Plan is the end of the quarter during which they joined the Plan. For Q1 2018, February 28th is used as the quarter-end date, as March data are not available.

[2] The stable value option in the Plan changed from the MIP II Class 3 to the American Airlines Stable Value Fund (which invested in the Wells Fargo Stable Value Fund W, a stable value commingled pool managed by Galliard) on June 30, 2017.

[3] This analysis includes all participants who joined the Plan during or after October 2015, and who were not previously enrolled in a US Airways Plan during the period for which data are available.

[4] Some participants are invested in multiple capital preservation options, so the percentages of participants may sum to greater than 100%.

Sources:

American Airlines Plan Participant Data; American Airlines, Inc. 401(k) Plan / US Airways, Inc. Employee Savings Plan, “Re: Stable Value Investment Option Change,” May 2017.

Exhibit 14

Exhibit 14

Number of Proposed Class Members
By Whether They Invested in the Stable Value Option When Available

Participants	Never Held Stable Value Option	Held Stable Value Option[3]	Total
Remained in the Plan Following the Plan Merger[4]	31,605	3,436	35,041
Moved into the Pilot Plan Following the Plan Merger[5]	5,243	1,607	6,850
Joined the Plan Following the Plan Merger[6]	677	83	760
Joined the Plan from the US Airways Plan[7]	953	348	1,301
Left the Plan Prior to the Plan Merger[8]	16,144	N/A	16,144
Total	**54,622**	**5,474**	**60,096**

Notes:

[1] All Proposed Class Members held the Credit Union Option while invested in the Plan.

[2] The Plan Merger occurred on October 17, 2015.

[3] This includes any Proposed Class Member who held one of the stable value options for any period.

[4] Remained in the Plan Following the Plan Merger includes Proposed Class Members who held the Credit Union Option for at least one period and were in the Plan for at least one period before and after the Plan Merger.

[5] Moved into the Pilot Plan Following the Plan Merger includes Proposed Class Members who held the Credit Union Option for at least one period prior to the Plan Merger and joined the Pilot Plan at the time of the Plan Merger. Proposed Class Members who were in both the Pilot Plan and the American Airlines Plan subsequent to the Plan Merger are counted as being in the American Airlines Plan.

[6] Joined the Plan Following the Plan Merger includes Proposed Class Members who held the Credit Union Option for at least one period, first became a Plan participant after the Plan Merger, and were not previously in the US Airways Plan.

[7] Joined the Plan From the US Airways Plan includes Proposed Class Members who held the Credit Union Option for at least one period and who were previously a member of the US Airways Plan. Proposed Class Members who were in both the US Airways Plan and the American Airlines Plan prior to the Plan Merger are counted as being in the American Airlines Plan.

[8] Left the Plan Prior to the Plan Merger includes Proposed Class Members who held the Credit Union Option for at least one period and left the Plan prior to the Plan Merger.

Source:

American Airlines Plan Participant Data.

Exhibit 15

Exhibit 15

Exchanges from the Fidelity Institutional Money Market Fund into Other Plan Options Following the Removal of the Fidelity Institutional Money Market Fund from the Plan

Q3 2016

Option	Assets		Participants	
	Millions	**%**	**Count**	**%**
Target Date Total[2]	$44.3	78.5%	2,491	89.6%
Credit Union Option	$3.0	5.2%	58	2.1%
MIP II	$1.7	2.9%	29	1.0%
Self-directed Brokerage Account	$1.1	1.9%	23	0.8%
Inflation Protection Fund	$0.4	0.7%	17	0.6%
US Small/Mid Cap Stock Index	$0.3	0.6%	18	0.6%
Emerging Markets Stock Index Fund	$0.3	0.6%	12	0.4%
US Large Cap Stock Index	$0.3	0.6%	16	0.6%
Diversified Bond Fund	$0.3	0.5%	19	0.7%
US Bond Index	$0.2	0.3%	9	0.3%
US Small/Mid Cap Stock Fund	$0.2	0.3%	10	0.4%
US Large Cap Value Stock Fund	$0.1	0.2%	7	0.3%
International Developed Markets Stock	$0.1	0.2%	3	0.1%
US Large Cap Growth Stock Fund	$0.1	0.2%	6	0.2%
International Stock Fund	$0.0	0.0%	4	0.1%
Untraceable[3]	$4.3	7.5%	140	5.0%
Total Exchanged From Fidelity Institutional Money Market Fund	**$56.4**	**100.0%**	**2,779**	**-**

Notes:

[1] An option is considered to have been the destination for assets exchanged out of the Fidelity Institutional Money Market Fund if there is an exact match between the assets exchanged out of the Fidelity Institutional Money Market Fund and the assets exchanged into the destination option during Q3 2016, for the same participant. Furthermore, if a participant exchanges assets into only one option in that quarter, any assets exchanged out of the Fidelity Institutional Money Market Fund are considered to have been exchanged into that option. Finally, if a participant's only exchange in the quarter is out of the Fidelity Institutional Money Market Fund, all exchanges into other options are considered destinations for the money market assets.

[2] All Target Date plan options are grouped together for this analysis.

[3] Exchanges are considered untraceable if a participant: (a) exchanges assets out of multiple plan options within Q3 2016, (b) exchanges assets into multiple plan options within Q3 2016, and (c) the amount exchanged out of the Fidelity Institutional Money Market Fund is not equal to the amount exchanged into any of the other plan options.

Source:

American Airlines Plan Participant Data.

Appendix A

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University Education:

Ph.D. in Finance, University of Chicago, 1987
Bachelor of Arts, Accounting, University of Utah, 1982 (First in Class)
Master of Business Administration, University of Utah, 1980 (First in Class)
Bachelor of Arts, Finance, University of Utah, 1979 (Magna Cum Laude)

Professional Designations:

Chartered Financial Analyst (CFA)
Certified Public Accountant (CPA)

Awards and Honors:

1990, Chicago Board of Trade Award for Outstanding Research
1991, Research Excellence Award, Pacific-Basin Capital Markets Conference
1992, The Pace Setters Research Award, College of Business, The Ohio State University
1994, Milken Foundation Research Grant
2002, Earl F. Cheit Outstanding Teaching Award, Walter A. Haas School, University of California at Berkeley
2005, Barclays Global Investors/Michael Brennan Award for the best paper in the *Review of Financial Studies*
2006, Referee of the Year, *Review of Financial Studies*
2007, Earl F. Cheit Outstanding Teaching Award, Walter A. Haas School, University of California at Berkeley
2008, Graham and Dodd Award, *Financial Analysts Journal*
2011, Elected President of the Western Finance Association
2012, First Prize, Fama/DFA Prize for Capital Markets and Asset Pricing, *Journal of Financial Economics*
2014, UCLA Anderson MFE Program, Teaching Excellence Award
2014, Honorable Mention, AQR Insight Award
2015, Amundi Smith Breeden Distinguished Paper Prize, *Journal of Finance*
2015, JFQA William F. Sharpe Best Paper Award *Journal of Financial and Quantitative Analysis*
2016, Honorable Mention, AQR Insight Award

Academic Appointments:

UCLA/Anderson School of Management
2013–Present, Senior Associate Dean and Director of the Doctoral Program
2004–Present, Allstate Professor of Insurance and Finance
1996–2004, Professor
1993–1996, Associate Professor

Walter A. Haas School, University of California at Berkeley
2001–2009, Visiting Professor of Finance, Master of Financial Engineering Program

College of Business, The Ohio State University
1991–1993, Associate Professor
1987–1991, Assistant Professor

Industry Experience:

1978–1979, American Equity Corporation, Mortgage Escrow Officer, Mortgage Lending Officer
1980-1981, JPS Financial Consultants, Financial Consulting and Litigation Support
1981–1983, Deloitte Haskins and Sells, Senior Consultant, Management Advisory Services
1984–1987, Chicago Board of Trade, Research Economist
1988–1994, Consultant, First Boston, Union Bank of Switzerland, Chicago Research and Trading, etc.
1995–1998, Salomon Brothers Inc., Head of Fixed Income Derivative Research, New York
1998–2008, Simplex Asset Management, Investment Committee of Hedge Fund, and Chief Investment Officer of Fund of Funds
1998–Present, Simplex Holdings, Consultant
2000–2016, Pacific Investment Management Company (PIMCO), Consultant, Training, Sabbatical from UCLA (Fall, 2007)
2008–2010, Barclays Global Investors, Consultant
2010–2015, Blackrock Inc., Consultant

Research Publications:

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21. Calling Nonconvertible Debt and the Problem of Related Wealth Transfer Effects, (with B. Tuckman), *Financial Management* 23, 21-27, 1994.

22. Comments on A Note on Parameter Estimation in the Two-Factor Longstaff and Schwartz Interest Rate Model (with E.S. Schwartz), *The Journal of Fixed Income* 3 (March), 101-102, 1994.

23. Option Pricing and the Martingale Restriction, *Review of Financial Studies* 8, 1091-1124, 1995.

24. A Simple Approach to Valuing Risky Fixed and Floating Rate Debt (with E.S. Schwartz), *Journal of Finance* 50, 789-819, 1995.

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28. Throwing Good Money After Bad? Cash Infusions and Distressed Real Estate (with B. Cornell and E.S. Schwartz), *Real Estate Economics* 24, 23-41, 1996.

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Advances in Futures and Options Research, 1993–1995
Review of Financial Studies, 1993–1995, 2003–2006
Journal of Banking and Finance, 1994–2000
Journal of Fixed Income, 1994–Present
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Journal of Financial Engineering, 1994–2000
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Journal of Empirical Finance, 1998–2000
Finance Research Letters, 2003–2010
Review of Derivatives Research, 2003–2006
Journal of Finance, 2006–2011
Financial Analysts Journal, 2010–Present
Review of Asset Pricing Studies, 2011–2016

Professional Service:

1996–1998, Advisory Board, MBA Track in Financial Engineering, Sloan School of Management, MIT
2004–2007, Board of Directors, American Finance Association
2002–Present, Research Associate, National Bureau of Economic Research
2005, Member Search Committee for Editor of the Journal of Finance
2008–2009, Board of Directors, Western Finance Association
2008–2010, Board of Trustees and Chairman of the Audit Committee, The Research Foundation of CFA Institute
2009, Founding Executive Director, UCLA Master of Financial Engineering Program
2009–2010, Vice President, Western Finance Association
2010-2011, President-Elect and Program Chair, Western Finance Association
2010-2011, Member Search Committee for Editor of the Journal of Finance
2011–2012, President, Western Finance Association

Corporate Boards:

1999-2002, Simplex Technology, Inc.

Testimony

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(CV current as of January, 2018).

Appendix B

Appendix B

Documents Considered

Legal Documents and Expert Reports

Document Title	Bates Start	Bates End
"Class Action Complaint (ERISA)," *Salvadora Ortiz and Thomas Scott v. American Airlines Inc., The American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union,* February 10, 2016		
"Plaintiffs' Memorandum of Law in Support of Motion for Class Certification," *Salvadora Ortiz and Thomas Scott v. American Airlines, Inc., The American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union,* March 23, 2018		
"Plaintiffs' Motion for Class Certification," *Salvadora Ortiz and Thomas Scott v. American Airlines, Inc., The American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union,* April 23, 2018		
"Declaration of Jack Dewitt in Support of Plaintiffs' Motion for Class Certification," *Salvadora Ortiz and Thomson Scott v. American Airlines, Inc., The American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union,* April 23, 2018 and exhibits thereto	APPX30	APPX51
"Declaration of James J. King, Jr., CFA in Support of Plaintiffs' Motion for Class Certification," *Salvadora Ortiz and Thomson Scott v. American Airlines, Inc., The American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union,* April 23, 2018 and exhibits thereto	APPX93	APPX110
"Declaration of Jonathan T. Suder," *Salvadora Ortiz and Thomson Scott v. American Airlines, Inc., The American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union,* April 23, 2018 and exhibits thereto	APPX20	APPX28
"Declaration of Roger L. Levy, LLM, AIFA in Support of Plaintiffs' Motion for Class Certification,"*Salvadora Ortiz and Thomson Scott v. American Airlines, Inc., The American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union,* April 23, 2018 and exhibits thereto	APPX53	APPX91
"Declaration of Salvadora Ortiz in Support of Plaintiffs' Motion for Class Certification," *Salvadora Ortiz and Thomson Scott v. American Airlines, Inc., The American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union,* April 23, 2018 and exhibits thereto	APPX112	APPX117
"Declaration of Todd M. Schneider in Support of Plaintiffs' Motion for Class Certification," *Salvadora Ortiz and Thomson Scott v. American Airlines, Inc., The American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union,* April 23, 2018 and exhibits thereto	APPX2	APPX18

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Document Title	Bates Start	Bates End
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EXHIBIT 2

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF TEXAS
FORT WORTH DIVISION

SALVADORA ORTIZ and THOMAS SCOTT, on behalf of them and all others similarly situated, Plaintiffs, v. AMERICAN AIRLINES INC., THE AMERICAN AIRLINES PENSION ASSET ADMINISTRATION COMMITTEE, and AMERICAN AIRLINES FEDERAL CREDIT UNION, Defendants.	Case No. 4:16-cv-00151-A

EXPERT REBUTTAL REPORT OF WALTER TOROUS, PH.D.

JULY 13, 2020

Table of Contents

I. INTRODUCTION

A. Qualifications

1. I, Walter Torous, am a Senior Lecturer at the Massachusetts Institute of Technology with a joint position at the Sloan School of Management and Center for Real Estate. I am also a Professor of Finance Emeritus and the former Lee and Seymour Graff Endowed Professor at the John E. Anderson School of Management at the University of California at Los Angeles. I received my Ph.D. degree in economics from the University of Pennsylvania in 1981. My areas of research include fixed income securities, equities, and derivative instruments as well as real estate markets, the behavior of stock prices, corporate governance, and financial distress. I have taught courses in managerial finance, investments, and real estate finance at the master's level and empirical methods in finance at the doctoral level. I am currently, or have been, the editor or associate editor of a number of finance and real estate finance journals.

2. I have published peer-reviewed articles on the pricing of a variety of financial instruments including equities, options, futures, corporate debt, and mortgage related securities. I have spoken at numerous academic and business conferences about my research.

3. My complete curriculum vitae, which includes a list of my publications, is attached as **Appendix A** to this report. **Appendix B** lists my testimony and expert submissions in the last four years.

B. Assignment

4. I have been retained as an expert by O'Melveny & Myers LLP ("Counsel"), counsel for the defendants American Airlines, Inc. and the American Airlines Pension Asset

Administration Committee. I understand that Salvadora Ortiz and Thomas Scott (collectively "Named Plaintiffs") bring this action against American Airlines, Inc., the American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union (together, "Defendants") individually and on behalf of participants and beneficiaries of an American Airlines sponsored 401(k) plan formerly known as the $uper $aver (the "Plan").[1]

5. Counsel has asked me to:

a. Discuss different capital preservation investment vehicles and the relevant differences in the risks and liquidity thereof;

b. Assess whether, from an economic perspective, it was reasonable to include the American Airlines Credit Union Demand Deposit Option (”Credit Union Option") in the Plan lineup; and

c. Review and, where appropriate, respond to the opinions and analyses presented by Plaintiffs' expert James J. King, Jr.[2] Specifically, I was asked to respond to Mr. King's opinion that "stable value funds are a superior investment option than both demand deposit accounts (such as the [Credit Union Option]) and money market funds for use as a principal preservation option in defined contribution plans."[3] I was also asked to respond to Mr. King's assertion that the Plan's failure to offer a stable value fund resulted in losses in excess of $180 million over the 2010 to 2017 period ("Review Period").[4]

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[1] "Class Action Complaint (ERISA)," *Salvadora Ortiz and Thomas Scott v. American Airlines Inc., The American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union*, February 10, 2016 ("Complaint").

[2] Expert Report of James J. King, Jr., July 6, 2020 ("King Report").

[3] King Report, ¶ 3.

[4] King Report, ¶¶ 3, 48. Some of the analyses in this report extend to the years after the Review Period, when appropriate and data are available.

C. Preparation of Report

6. In forming my opinions in this case, I have relied on my education, knowledge, and experience in economics, finance, and investments. I have also reviewed documents, depositions, and information produced in this case including the King Report and the expert report submitted by Francis Longstaff on behalf of Defendants in connection with class certification ("Longstaff Class Cert Report"). In parts of this report, I adopt, replicate, and extend some of the analyses contained in the Longstaff Class Cert Report. **Appendix C** contains a list of materials that I, and others working under my direction, have reviewed and that I considered in preparing my report. My work on this matter is ongoing and my opinions are subject to revision based on new information, which subsequently may be provided to or obtained by me.

7. My hourly rate for time I spend on this matter is $875 per hour. At the time I finalized this report on July 13, 2020, I have spent 49.5 hours on this assignment, equivalent to $43,312.50. I expect to accrue additional compensation at that same hourly rate for time spent preparing for and attending my deposition, and any potential additional work. In addition, I expect to receive compensation based on the professional fees that Analysis Group, Inc. ("Analysis Group"), a financial and economic consulting firm, receives for providing research support under my direction and supervision. My fees and Analysis Group's fees do not depend upon the opinions I form nor upon the outcome of this litigation.

II. SUMMARY OF OPINIONS

8. Based on my research and analysis to date, I have reached the following opinions.

- From an economic perspective, it was reasonable to include the Credit Union Option in the Plan's investment lineup.
  - Demand deposit accounts (such as the Credit Union Option), money market funds, and stable value funds are three types of capital preservation investments. Relative to stable value funds, money market funds and the Credit Union Option provide additional liquidity and safety benefits.
  - The majority of defined contribution plans offer money market funds. This prevalence indicates that the fiduciaries of the majority of plans have not decided to offer a stable value option as their plan's sole capital preservation option.
  - The Credit Union Option provided higher returns than did money market funds and most other demand deposit accounts.
- Plaintiffs' and Mr. King's contention that stable value funds are superior to the Credit Union Option (and money market funds) ignore the liquidity and risk advantages of the Credit Union Option and the common fiduciary practices of retirement plans;
- Mr. King's opinions related to harm and damages are speculative, both as to the Named Plaintiffs and Plan-wide;
- The supposed benchmark returns that Mr. King uses in his damages calculation have no reliable basis as realistic alternative investment that the Plan could have offered;
- It is not realistic for capital preservation investments to consistently outpace inflation; and
- Plaintiffs' claims regarding a higher interest rate paid to the checking account customers of the American Airlines Credit Union ("AA Credit Union") is misleading.

9. I set forth my findings in more detail in the remainder of this report, including the associated exhibits and appendices.

III. BACKGROUND AND OVERVIEW OF CAPITAL PRESERVATION VEHICLES

A. Defendants

10. American Airlines serves as the sponsor and administrator of the Plan.[5] The company is a wholly owned subsidiary of American Airlines Group, Inc. and employed 133,700 people worldwide as of the end of 2019.[6]

11. The American Airlines Pension Asset Administration Committee ("PAAC") is one of several committees responsible for Plan administration. At the beginning of the Review Period, these included the PAAC, the Benefits Strategy Committee ("BSC"), and the Pension Benefits Administration Committee ("PBAC"). The PAAC was responsible for the selection of trustees and investment managers. The PBAC was responsible for general operations, selection of service providers, review of appealed claims, and the adoption of certain Plan amendments. The BSC was responsible for approving certain material Plan amendments and appointing members of the other two committees.[7] I refer to the PAAC, PBAC, BSC, and their successor committees as the Plan Committees.

12. The AA Credit Union was "founded in 1936 by a small group of American Airlines employees who shared the goal of creating a member-owned, cooperative financial

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[5] "Summary Plan Description for $uper $aver, a 401(k) Capital Accumulation Plan for Employees of Participating AMR Corporation Subsidiaries," *American Airlines*, July 2009 and effective August 24, 2010, AA-APP006 – AA-APP048, at AA-APP036.

[6] American Airlines 2019 Form 10-K, filed February 19, 2020, p. 4.

[7] "Summary Plan Description for $uper $aver, a 401(k) Capital Accumulation Plan for Employees of Participating AMR Corporation Subsidiaries," *American Airlines*, July 2009 and effective August 24, 2010, AA-APP006 – AA-APP048, at AA-APP036-37.

institution where employees could help one another."[8] The AA Credit Union had more than $7.7 billion in assets as of January 1, 2020.[9]

13. Credit unions are "corporation[s] chartered under the *Federal Credit Union Act* to serve groups having a common bond of occupation or association, or groups within a well-defined, local neighborhood, community, or rural district."[10] Like all credit unions, the AA Credit Union is a "not-for-profit financial institution cooperative organized to provide its members with a place to save and a source of loans at reasonable rates."[11]

B. The Plan

14. The Plan is a participant-directed 401(k) plan covering current and former employees of American Airlines and other participating subsidiaries of its parent corporation, American Airlines Group, Inc. 401(k) plans are tax advantaged retirement savings vehicles offered by many employers to assist their employees in saving for retirement.

15. Plan participants who are current employees may contribute a portion of their pre-tax compensation to the Plan via an individual account.[12] In addition to participant contributions, American Airlines provides matching contributions dollar-for-dollar, up to

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[8] "About AA Credit Union," *American Airlines Credit Union*, 2020. Accessed June 26, 2020, <https://www.aacreditunion.org/about-aacreditunion.aspx>.

[9] "About AA Credit Union," *American Airlines Credit Union*, 2020. Accessed June 26, 2020, <https://www.aacreditunion.org/about-aacreditunion.aspx>.

[10] "Federal Credit Union Handbook," *National Credit Union Administration*. Accessed July 1, 2020, <https://www.frbfcu.org/PDF%20Files/ncuafcu_handbook.pdf >, p. 7.

[11] "Federal Credit Union Handbook," *National Credit Union Administration*. Accessed July 1, 2020, <https://www.frbfcu.org/PDF%20Files/ncuafcu_handbook.pdf >, p. 7.

[12] While the pre-tax contributions are subject to IRS limits, Plan participants may also elect to make post-tax contributions above the IRS limit.

5.5 percent of the participant's eligible compensation.[13] Total Plan assets ranged from $6.2 billion to $10.6 billion during the period from 2010 through 2017, while the number of participants ranged from approximately 75,000 to 100,000 over the same period.[14]

16. Throughout the Review Period, the Plan lineup contained a diversified set of investment options. **Exhibit 1A** reproduces an exhibit from the Longstaff Class Cert Report that lists the assets invested in each Plan option as of year-end 2010 through 2014. During this period, the Plan's investment options included a range of asset classes, such as U.S. and international equity funds, fixed income funds, and the Credit Union Option. In addition, participants could select from three Pre-Mixed Portfolios, each of which invested in funds offered in the Plan based on one of three investment risk profiles (Conservative, Moderate, and Aggressive).

17. The Plan's investment lineup was revised after AMR Corporation, American Airlines' parent company at the time, merged with US Airways Group Inc. ("US Airways"). In particular, on October 17, 2015, the US Airways 401(k) plan was merged into the Plan. I refer to this event as the "Plan Merger" herein.[15]

18. **Exhibit 1B**, also reproduced from the Longstaff Class Cert Report, lists the assets invested in each Plan option as of year-end 2015 through 2017. At the date of the Plan Merger, the Plan's lineup included, among other investments, the Credit Union Option,

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[13] "Summary Plan Description for $uper $aver, a 401(k) Capital Accumulation Plan for Employees of Participating AMR Corporation Subsidiaries," *American Airlines*, July 2009 and effective August 24, 2010, AA-APP006 – AA-APP048, at AA-APP030; American Airlines, Inc., 401(k) Plan Form 5500, December 31, 2018, Notes to Financial Statements, p. 6.

[14] **Exhibits 1A–1B**; American Airlines Plan Participant Data.

[15] I understand that after the Plan Merger, the American Airlines, Inc. 401(k) Plan for Pilots ("Pilot Plan") was created for pilots. I understand that the Pilot Plan is not at issue in this case and all of my analyses exclude the Pilot Plan.

Fidelity Managed Income Portfolio II ("MIP II") (a stable value fund), and Fidelity Institutional Money Market Fund ("FIMM").[16] The FIMM was removed from the Plan lineup in Q3 2016.[17] In June 2017, the American Airlines Stable Value Fund ("AA Stable Value Fund") replaced MIP II in the Plan lineup. The AA Stable Value Fund, in turn, invested in the Wells Fargo Stable Value Fund W.[18]

C. Capital Preservation Vehicles

19. Money market funds (such as FIMM), stable value funds (such as MIP II and AA Stable Value Fund), and demand deposit accounts (such as the Credit Union Option) are examples of investments known as "capital preservation" investments. Capital preservation investments prioritize protecting the existing value of assets over earning a return on those assets.

20. The financial crisis in the late 2000s showed the continued importance of capital preservation investments. For example, the S&P 500 Index declined approximately 37 percent in 2008.[19] The declines in security prices at the time led to substantial losses in 401(k) accounts, with participants having account balances over $200,000 incurring average losses of more than 25 percent.[20]

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[16] American Airlines, Inc. 401(k) Plan / US Airways, Inc. Employee Savings Plan, "Time to learn: Investment Details Guide," October 2015, AA-APP121 – AA-APP172, at AA-APP149.

[17] American Airlines Plan Participant Data.

[18] American Airlines, Inc. 401(k) Plan / US Airways, Inc. Employee Savings Plan, "Time to learn: Investment Details Guide," October 2015, AA-APP121 – AA-APP172, at AA-APP165 – AA-APP166.; American Airlines, Inc. 401(k) Plan and American Airlines, Inc. 401(k) Plan for Pilots, "Re: Stable Value Investment Option Change," *American Airlines*, May 2017.

[19] Morningstar Direct.

[20] VanDerhei, J., "The Impact of the Recent Financial Crisis on 401(k) Account Balances," *Employee Benefit Research Institute*, Issue No. 326, February 2009, p. 1.

1. Federally Insured Demand Deposit Accounts

21. Demand deposit accounts, such as a checking account, are held at a financial institution such as a bank or a credit union. As discussed above, eligibility for membership in a federal credit union is limited to the people sharing the common bond described in the field of membership set forth in the credit union's charter.[21]

22. The Credit Union Option is a demand deposit account offered by the AA Credit Union. The AA Credit Union was founded more than 80 years ago and is available for active and retired employees of American Airlines and others working in the air transportation industry, along with their families.[22]

23. Investments in a credit union demand deposit account, including those in the Credit Union Option, are insured by the National Credit Union Administration ("NCUA") up to $250,000.[23] Therefore, even in the event of the credit union failure, investors will not lose their money up to a limit of $250,000 per investor. In fact, according to the NCUA, "[c]redit union members have ***never*** lost even a penny of insured savings at a federally insured credit union."[24]

24. The federal guarantee has value, as indicated by **Exhibit 2A** and **Exhibit 2B**, which expand an analysis included in the Longstaff Class Cert Report to show that investors in

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[21] "Federal Credit Union Handbook," *National Credit Union Administration*. Accessed July 1, 2020, <https://www.frbfcu.org/PDF%20Files/ncuafcu_handbook.pdf>, p. 13.

[22] "Why the Credit Union?," *American Airlines Credit Union*, 2018. Accessed July 1, 2020, <https://www.aacreditunion.org/membership/why-the-credit-union>.

[23] "How Your Accounts Are Federally Insured," *National Credit Union Administration*, February 2018. Accessed July 1, 2020, <https://www.ncua.gov/legal/guidesetc/guidesmanuals/ncuahowyouracctinsured.pdf>; American Airlines, Inc. 401(k) Plan / US Airways, Inc. Employee Savings Plan, "Time to learn: Investment Details Guide," October 2015, AA-APP121 – AA-APP172, at AA-APP147.

[24] "Share Insurance Fund Overview," *National Credit Union Administration*. Accessed July 1, 2020, <https://www.ncua.gov/support-services/share-insurance-fund>. Emphasis added.

high quality investment-grade corporate bonds demanded higher interest rates than investors in Treasury bonds of similar duration during the Review Period.[25] The fact that the market clearing prices for U.S. government bonds provide investors with lower interest rates than the market clearing prices for investment-grade corporate bonds demonstrates that investors value the guarantee of payment provided by the U.S. government.

25. This federal protection shielded the overwhelming majority of Plan investments in the Credit Union Option from risk of loss. An analysis of the Plan participant data, presented in **Exhibit 3**, shows that in each year from 2010 to 2017 at least 87.9 percent of the assets invested in the Credit Union Option were in participant accounts with less than $250,000 in the Credit Union option and thus their principal and accrued interest were fully guaranteed. Similarly, as the exhibit shows, more than 96 percent of participants had a balance of less than $250,000 in the Credit Union Option, meaning that their principal and accrued interest in the Credit Union Option were fully guaranteed.

26. The value of the federal guarantee is especially material during economic crises. For example, almost 500 banks failed between 2008 through 2013, following the financial crisis at cost of $73 billion to the Federal Deposit Insurance Corporation.[26] Furthermore, recent events have demonstrated that money market funds are not riskless. During the 2008 financial crisis, the Reserve Primary Fund "broke the buck" — meaning the net asset value dropped below 99.5 cents a share and investors may have lost part of their

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[25] The "2-Year High Quality Market Corporate Bond Par Yield" and "5-Year High Quality Market Corporate Bond Par Yield" shown in **Exhibits 2A** and **2B** include data on corporate bonds rated AAA, AA, or A.

[26] "Bank Failures in Brief- Summary 2001 through 2020," *Federal Deposit Insurance Corporation*, Accessed July 1, 2020, <https://www.fdic.gov/bank/historical/bank/>.

principal investment[27] — resulting in a record one-day redemption of $144.5 billion across the money market industry.[28] To address these issues, the U.S. Securities and Exchange Commission instituted new regulations on money market funds in 2014 requiring, among other items, that institutional money market funds have a floating net asset value beginning in 2016.[29] Still, in March 2020 assets flowed out of prime money market funds, which — combined with low yields on U.S. treasury securities — resulted in the net asset value dropping below $1 for some money market funds.[30]

2. Money Market Funds

27. Money market mutual funds are fixed income mutual funds that are required by federal regulation to invest in high credit quality debt securities that have a very short maturity,[31] such as U.S. Treasury securities, municipal securities, commercial paper, and certificates of deposit.[32] The returns of such funds, while not guaranteed, have historically been positive due to the low risk of their underling investments.

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[27] Leetaru, L., "Why Your Money-Mark Fund Isn't as Safe as You Think," *Barron's*, Accessed July 6, 2020, <https://www.barrons.com/articles/why-your-money-market-fund-isnt-as-safe-as-you-think-51593719678>.

[28] Kimberly Amadeo, "Reserve Primary Fund, How It Broke the Buck Causing a Money Market Run," *The Balance*, November 15, 2018, Accessed July 7, 2020, <https://www.thebalance.com/reserve-primary-fund-3305671>.

[29] Specifically, "[t]he new rules require a floating net asset value (NAV) for institutional prime money market funds, which allows the daily share prices of these funds to fluctuate along with changes in the market-based value of fund assets and provide non-government money market fund boards new tools – liquidity fees and redemption gates – to address runs." (Securities and Exchange Commission, "SEC Adopts Money Market Fund Reform Rules," July 23, 2014, Accessed July 7, 2020, <https://www.sec.gov/news/press-release/2014-143>.)

[30] Leetaru, L., "Why Your Money-Mark Fund Isn't as Safe as You Think," *Barron's*, Accessed July 6, 2020, <https://www.barrons.com/articles/why-your-money-market-fund-isnt-as-safe-as-you-think-51593719678>.

[31] As of May 5, 2010, money market funds' required maximum dollar-weighted average maturity was reduced from 90 days to 60 days. (Murphy, E., "Money Market Fund Reform," *U.S. Securities and Exchange Commission*, Release No. IC-29132, February 23, 2010, p. 37).

[32] Schapiro, M., "Testimony on 'Perspectives on Money Market Mutual Fund Reforms,'" *U.S. Securities and Exchange Commission*, June 21, 2012; "What are money market funds?" *Fidelity*. Accessed July 1, 2020, <https://www.fidelity.com/learning-center/investment-products/mutual-funds/what-are-money-market-funds>.

3. Stable Value Funds

28. Stable value funds are fixed income investments designed to provide the preservation of capital. While there are a variety of different possible structures, stable value funds share two features: (1) a portfolio of underlying fixed income investments, and (2) a limited "guarantee" from an insurance company or other financial institution that, in contractually specified circumstances, the investor will be able to withdraw his or her principal plus any accumulated interest (referred to as the "book value" of the investments).

29. In some structures (*e.g.*, guaranteed investment contracts, or GICs), the stable value fund's assets are held by an insurance company providing the "guarantee," and may be subject to the claims of some or all of the company's other creditors should the company become insolvent.

30. In the structure employed by the stable value options offered by the Plan,[33] the financial institution that holds and manages the fund's assets contracts with one or more third-parties to provide the "guarantee" through "wrap" contracts.[34]

31. Wrap contracts are designed to enable stable value fund investors to transact at the book value of their investments, such that they may receive the value of their principal plus

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[33] According to the Fact Sheet for the Fidelity MIP II, "the Portfolio also purchases third party wrap contracts designed to permit the use of book value accounting to maintain a constant NAV and to provide for the payment of participant-directed withdrawals and exchanges at book value under most circumstances." According to the Fact Sheet for the Wells Fargo Stable Value Fund, "[t]he majority of the Fund's assets will be invested in fixed income portfolios that are wrapped by stable value contracts which allow fund participants to transact at book value." (Fidelity MIP II Fact Sheet, March 31, 2020, p. 1; Wells Fargo Stable Value Fund M Fact Sheet, March 31, 2020, p. 1.)

[34] "Stable Value FAQ," *Stable Value Investment Association*, 2013. Accessed July 1, 2020, <https://stablevalue.org/media/misc/Stable_Value_FAQ.pdf>, pp. 1-2.

accumulated interest regardless of whether the market value of the underlying portfolio has declined.[35]

32. The rate of interest that investors accrue on their investments in a stable value fund is referred to as the "crediting rate." In the case of stable value funds that use wrap contracts to provide the "guarantee," the crediting rate is set on a periodic basis (*e.g.*, monthly or quarterly) in accordance with a formula stipulated in the wrap contracts.

D. Capital Preservation Options in the Plan

33. As described above, the Plan investment lineup included a demand deposit account, the Credit Union Option, throughout the Review Period. A money market fund and a stable value fund, the FIMM and the MIP II respectively, were added in October 2015. The FIMM was removed from the Plan in Q3 2016.[36] In June 2017 the MIP II was replaced by the AA Stable Value Fund.[37]

34. The Credit Union Option was widely held by Plan participants during the Review Period. **Exhibit 1A** shows that, as of each year-end between 2010 and 2013, it was the most widely-held of the Plan's investment options in terms of assets invested, accounting for between $1.1 billion and $1.7 billion in Plan assets (equating to between 14.0 and 27.4 percent of Plan assets). In 2014 it was the second most widely-held option, after the S&P 500 Index Fund option, with $1.1 billion in assets (equating to 12.0 percent of Plan assets).

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[35] "Advisory Council Report on Stable Value Funds and Retirement Security in the Current Economic Conditions," *United States Department of Labor*. Accessed July 1, 2020, <https://www.dol.gov/agencies/ebsa/about-ebsa/about-us/erisa-advisory-council/2009-stable-value-funds-and-retirement-security-in-the-current-economic-conditions>.

[36] American Airlines Plan Participant Data.

[37] American Airlines, Inc. 401(k) Plan and American Airlines, Inc. 401(k) Plan for Pilots, "Re: Stable Value Investment Option Change," *American Airlines*, May 2017.

35. The Credit Union Option remained widely-held even after the Plan Merger, when additional capital preservation options were added in the form of money market and stable value options. As illustrated in **Exhibits 4A** and **4B**, reproduced from the Longstaff Class Cert Report, a large amount of assets and a high percentage of Plan participants were invested in the Credit Union Option. As **Exhibit 4A** shows, at quarter-end between Q4 2015 (the quarter of the Plan Merger) and February 2018, between $666 million and $802 million in assets were invested in the Credit Union Option (between 6.2 and 11.3 percent of Plan assets).[38] In comparison, the highest balance in the stable value option in any quarter was $192 million (2.1 percent of Plan assets) and the money market fund had at most $56 million (0.8 percent of Plan assets) before its removal.[39] Focusing only on the assets invested in capital preservation options, **Exhibit 4A** shows that between 77.7 and 89.4 percent of such assets were invested in the Credit Union Option as of each quarter-end between the end of 2015 and Q1 2018 (compared to between 6.1 and 6.3 percent for the money market option, and between 8.1 and 22.3 percent for the stable value option).

36. A high percentage of Plan participants invested in the Credit Union Option as well. As illustrated in **Exhibit 4B**, between 15.9 and 23.8 percent of Plan participants, invested in the Credit Union Option as of each quarter-end from Q4 2015 to Q1 2018 (compared to between 3.2 and 3.3 percent for the money market option, and between 3.6 and 6.1

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[38] I do not have Plan Participant Data as of the end of Q1 2018, so the exhibit uses as of February 28, 2018 for that quarter.

[39] Although the Plan's overall investment in the Credit Union Option declined at the time of the Plan Merger, the decline was principally attributable to participants with balances in the Credit Union Option being moved to the separate and newly-created Pilot Plan. Taking into account both the Plan and the newly-created Pilot Plan, between $1.0 billion and $1.3 billion in assets were invested in the Credit Union Option, compared to at most $388 million in the stable value fund and $134 million in the money market fund before its removal.

percent for the stable value option). And looking only at those participants who invested some of their assets in a capital preservation option during the same period, between 75.5 and 87.0 percent invested in the Credit Union Option (compared to between 11.3 and 12.3 percent for the money market option, and between 13.7 and 28.8 percent for the stable value option).[40]

IV. FROM AN ECONOMIC PERSPECTIVE, IT WAS REASONABLE TO INCLUDE THE CREDIT UNION OPTION IN THE PLAN'S INVESTMENT LINEUP, CONTRARY TO PLAINTIFFS' ALLEGATIONS

37. I understand that Plaintiffs' precise theory of liability against Defendants has varied over the course of this case. As referenced in the Longstaff Class Cert Report, Plaintiffs asserted in their proposed class notice, under the heading "What This Lawsuit Is About," that "Plaintiffs claim that Defendants violated the federal Employee Retirement Income Security Act of 1974 ('ERISA'), ***by imprudently failing to include a stable value fund either in place of or in addition to the American Airlines Credit Union Demand Deposit Option*** (the 'Credit Union Option') among the designated Investment alternatives offered by the Plan."[41] Under this articulation, Plaintiffs indicated that they were not challenging the inclusion of the Credit Union Option itself but were instead challenging the absence of a stable value fund alternative.

38. As explained in the Longstaff Class Cert Report, Plaintiffs' own conduct directly conflicted with this theory in that a stable value alternative was added to the Plan in

[40] These values do not sum to 100 percent because some participants may invest in multiple capital preservation options.

[41] Plaintiff's Class Notice, APPX11 – APPX18, at APPX12 (Emphasis added).

October 2015, yet neither Plaintiff ever allocated any portion of their accounts to that alternative.[42] Indeed, Ms. Ortiz and Mr. Scott avoided the Plan's stable value option even after filing this lawsuit in early 2016 asserting that stable value funds are superior to the Credit Union Option. Rather than reallocate assets to the Plan's stable value option when it became available, Ms. Ortiz retained her holdings in the Credit Union Option until August 2016, at which point she left the Plan.[43] Mr. Scott, in turn, transferred his balance in the Credit Union Option (together with over $32,000 from other Plan investment options) to a money market fund option when both the stable value option and the money market fund option became available in October 2015 and then, in September 2016, a week prior to the previously-announced removal of the money market option offered by the Plan, he moved his remaining balance in the money market option back to the Credit Union Option.[44]

39. I understand that, since the issuance of the Longstaff Class Cert Report, Plaintiffs have rearticulated their theory against the American Airlines Defendants as follows:

> "Plaintiffs claim that American Airlines breached its fiduciary duty by imprudently and disloyally selecting and retaining a capital preservation option (the AAFCU option) that had dramatically lower investment returns than other readily available capital preservation investments, including stable value funds. The measure of damages against the American Airlines Defendants is the difference between the interest rate that would have been

[42] Longstaff Class Cert Report, ¶¶ 58-60.

[43] "Retirement Savings Statement, American Airlines, Inc. 401(k) Plan – Salvadora Ortiz," *Fidelity Investments*, October 28–November 2, 2015, 2015; "Ortiz trans history thru 08-05-2016.xlsx."

[44] "Retirement Savings Statement, American Airlines, Inc. 401(k) Plan – Thomas Scott," *Fidelity Investments*, October 28–November 2, 2015, pp. 2, 3; Deposition of Thomas Scott, September 26, 2018 ("Scott Dep."), at 98:4-12; "Scott trans history thru 04-04-2018.xlsx.".

> provided by the prudent choice and the much lower interest earned on the alleged imprudent choice. "[45]

40. Thus, Plaintiffs now appear to contend that the inclusion of the Credit Union Option was improper regardless of whether the plan also included a stable value fund alternative.

41. Plaintiffs' theory, however, appears to still be based on the premise that stable value funds are inherently superior to Credit Union Option (as well as to similarly liquid capital preservation vehicles such as money market funds). Indeed, Plaintiffs' expert, James King, asserts that,

> "[i]n the context of a Defined Contribution Plan (in which participants invest their own individual account proceeds), Stable Value is absolutely superior to Money Market (and by extension superior to the AACUF), as any reasonable due diligence process would make clear."[46]

42. Plaintiffs' contention, however, ignores that, while stable value funds may offer greater returns under certain market conditions, these greater returns come at a cost. Stable value funds are less liquid than the Credit Union Option and money market funds. And stable value funds are riskier than the Credit Union Option, which is a backed by a guarantee by the federal government.

43. Plaintiffs', as well as Mr. King's, suggestion that stable value funds are so superior to money market funds "and by extension superior to the [Credit Union Option]"[47] that no reasonable fiduciary would include the latter is refuted by the actual practice of defined contribution plan fiduciaries. According to the multiple surveys, including the MetLife

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[45] Order Re Plaintiffs' Trial Experts, *Salvadora Ortiz and Thomas Scott v. American Airlines Inc., The American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union*, June 15, 2020, p. 4.

[46] King Report, ¶ 12.

[47] King Report, ¶ 12.

survey cited in the Complaint regarding the prevalence of stable value funds, the majority of defined contribution plans offer money market funds in the their investment lineups. As discussed above, access to credit union demand deposit vehicles is restricted by regulation, and it is thus unsurprising that relatively few plans report offering credit union demand deposit vehicles as plan investment options. But, given the advantages of the Credit Union Option over money market funds, it is reasonable to conclude that, given access to the Credit Union Option, a reasonable fiduciary or other investor would view the Credit Union Option as an appropriate investment alternative.

A. Relative to Stable Value Funds, Money Market Funds and the Credit Union Option Provide Additional Liquidity Benefits

44. Stable value funds are less liquid than both the Credit Union Option and money market funds. This is because, in order for the fund to guarantee investors' ability to transact at book value, even when market value is lower, certain restrictions are imposed.

45. The equity wash provision typically prohibits participants from transferring assets to competing funds. Competing funds generally include short-term bond and money market funds, and may include other investment options as well.[48] For example, the AA Stable Value fund requires that, prior to moving assets from the fund to the Credit Union Option or to the Plan's brokerage account option, investors have to first exchange those assets

[48] For example, *see* "401(k) Plans: Certain Investment Options and Practices That May Restrict Withdrawals Not Widely Understood," *United States Government Accountability Office*, GAO-11-291, March 2011. Accessed July 1, 2020, <https://www.gao.gov/new.items/d11291.pdf>, pp. 11-12, 28 ("As part of the price of providing this [book value] guarantee, contract providers typically require certain restrictions on plan sponsor and participant withdrawals or transfers of plan assets from stable value funds.").

into one of the other funds in the Plan's investment lineup for at least 90 days. Those funds are generally risker than capital preservation vehicles.[49]

46. There are also liquidity restrictions at the plan level that may limit a fiduciary's ability to remove a stable value fund from a plan investment lineup. For example, plan-level transactions[50] in stable value funds, such as layoffs, early retirement windows, and plan terminations, generally require at least 12 months of advance notice to the stable value fund.[51] The requirement to provide advance notice is commonly referred to as a "put option."[52] If a plan exercises a put option and the market value is below the book value of the fund, the ERISA Advisory Council to the Department of Labor ("DOL") notes that the plan "commonly must choose between taking all of its funds at market value or waiting up to 12 months after serving notice of its intent to withdraw the funds."[53] Furthermore:

> During this 12 month period, the crediting rate on the funds is reduced so that at the end of the 12 month period, the market value and book value

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[49] American Airlines, Inc. 401(k) Plan and American Airlines, Inc. 401(k) Plan for Pilots, "Re: Stable Value Investment Option Change," *American Airlines*, May 2017, p. 4; American Airlines, Inc. 401(k) Plan / US Airways, Inc. Employee Savings Plan, "Time to learn: Investment Details Guide," October 2015, AA-APP121 – AA-APP172, at AA-APP149.

[50] A plan-level transaction may include events such as layoffs, early retirement windows, and plan terminations, which may cause an outflow of plan assets. For example, *see* American Airlines, Inc. 401(k) Plan / US Airways, Inc. Employee Savings Plan, "Time to learn: Investment Details Guide," October 2015, AA-APP121 – AA-APP172, at AA-APP149.

[51] "Stable Value FAQ," *Stable Value Investment Association*, 2013. Accessed July 1, 2020, <https://stablevalue.org/media/misc/Stable_Value_FAQ.pdf>, p. 4.

[52] "Stable Value FAQ," *Stable Value Investment Association*, 2013. Accessed July 1, 2020, <https://stablevalue.org/media/misc/Stable_Value_FAQ.pdf>, p. 4.

[53] "Advisory Council Report on Stable Value Funds and Retirement Security in the Current Economic Conditions," *United States Department of Labor*. Accessed July 1, 2020 <https://www.dol.gov/agencies/ebsa/about-ebsa/about-us/erisa-advisory-council/2009-stable-value-funds-and-retirement-security-in-the-current-economic-conditions>.

converge. This process assures principal preservation but results in a liquidity restriction.[54]

47. Unlike stable value funds, the Credit Union Option is not subject to a put option that prevents Plan fiduciaries from removing it as a plan investment option, nor is it subject to any equity wash restrictions. Indeed, I understand that there are no restrictions on withdrawals or transfers from the Credit Union Option beyond those that applied to the Plan as a whole.

B. The Credit Union Option Provided Greater Safety than did Stable Value and Money Market Funds

48. Investments in a credit union demand deposit account, including those in the Credit Union Option, are insured by the National Credit Union Administration ("NCUA") up to $250,000.[55] Therefore, even in the event of the credit union failure, investors are protected from losing their money up to a limit of $250,000 per investor. In fact, according to the NCUA, "[c]redit union members have ***never*** lost even a penny of insured savings at a federally insured credit union."[56]

49. Money market funds typically come with no such guarantee. Additionally, unlike the federal government's guarantee of investors' first $250,000 of credit union deposits, a stable value fund's "guarantee" generally comes with contractual limitations that increase

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[54] "Advisory Council Report on Stable Value Funds and Retirement Security in the Current Economic Conditions," *United States Department of Labor*. Accessed July 1, 2020 <https://www.dol.gov/agencies/ebsa/about-ebsa/about-us/erisa-advisory-council/2009-stable-value-funds-and-retirement-security-in-the-current-economic-conditions>.

[55] "How Your Accounts Are Federally Insured," *National Credit Union Administration*, February 2018. Accessed July 1, 2020, <https://www.ncua.gov/legal/guidesetc/guidesmanuals/ncuahowyouracctinsured.pdf>, p. 1; American Airlines, Inc. 401(k) Plan / US Airways, Inc. Employee Savings Plan, "Time to learn: Investment Details Guide," October 2015, AA-APP121 – AA-APP172, at AA-APP147.

[56] "Share Insurance Fund Overview," *National Credit Union Administration*. Accessed July 1, 2020, <https://www.ncua.gov/support-services/share-insurance-fund>. Emphasis added.

the risk that an investor will suffer losses. For example, the United States Department of Treasury's Office of the Comptroller of the Currency has noted that:

> There are a few, limited instances when participants do not get book value from a stable value fund. These limited instances are typically defined in the contract. One such instance typically not covered is security defaults or downgrades. To protect the integrity of the stable value fund, most contracts incorporate investment guidelines establishing minimum credit quality requirements for the underlying securities. These contracts have established mechanisms to address downgraded or defaulted securities that fall outside the contractual guidelines. Corporate-initiated events—which are employer-driven events, such as an early retirement program, layoff, or bankruptcy—are also typically not covered. Corporate-initiated events generally cause withdrawals en masse from a stable value fund. These withdrawals can negatively impact investors and plans that choose to remain in the fund.[57]

50. These risks are particularly pertinent here. Even before the current pandemic-related financial issues, the airline industry has faced numerous bankruptcies and associated layoffs.[58] In particular, American Airlines filed for Chapter 11 bankruptcy on November 29, 2011,[59] which is during the Review Period.

51. Consistent with these risks, the investment guides describing the stable value funds offered in the Plan state that, in some instances, participants may receive less than the book value of their investment balance, which may be of particular concern during the current economic downturn. For example, the Plan's 2015 investment guide that I

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[57] "Retirement Plan Products and Services," *Office of the Comptroller of the Currency*, Comptroller's Handbook AM-RPPS, Version 1.0, February 2014. Accessed July 9, 2020, <https://www.occ.treas.gov/publications/publications-by-type/comptrollers-handbook/retirement-plan-products-services/pub-ch-retirement-plan.pdf>, p. 34.

[58] "Since 1978, there have been well over 100 bankruptcy filings, although not all of these have resulted in liquidation." Airline for America, "U.S. Airline Bankruptcies," Accessed July 9, 2020, <https://www.airlines.org/dataset/u-s-bankruptcies-and-services-cessations/#>.

[59] Kyle Peterson, Matt Daily, "American Airlines Files for Bankruptcy," Reuters, November 29, 2011, Accessed July 9, 2020, < https://www.reuters.com/article/us-americanairlines/american-airlines-files-for-bankruptcy-idUSTRE7AS0T220111130>.

understand was provided to Plan participants states that for MIP II, "withdrawals prompted by certain events (e.g., layoffs, early retirement windows, spin-offs, sale of a division, facility closings, plan terminations, partial plan terminations, changes in laws or regulations) may be paid at the market value of the fund's securities, which may be less than your book value balance."[60] Similarly, a disclosure for the fund underlying the AA Stable Value Fund states that there is "no guarantee that the liquidity needs of all Fund participants will be met" and, if liquidity buffers were inadequate, forced sales of securities could "cause a deviation between the Fund's market value and contract value."[61]

52. These risks are not just theoretical. Indeed, as the Longstaff Class Cert Report discusses, some risks materialized in the years leading up to the Review Period. For example, after Lehman Brothers declared bankruptcy in 2008, the stable value fund that Invesco offered to Lehman Brothers employees lost 1.7 percent in value because of a fall in bond prices and because the wrap contract ended in response to Lehman's bankruptcy filing.[62] Similarly, after Chrysler's Chapter 11 bankruptcy in 2009, the stable fund held in the Chrysler LLC retirement plan liquidated and participants investing in the stable value fund received only $0.89 on the dollar.[63] Many other funds were at risk as well. For instance, the DOL report (discussed above) noted that the market value of many stable

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[60] American Airlines, Inc. 401(k) Plan / US Airways, Inc. Employee Savings Plan, "Time to learn: Investment Details Guide," October 2015, AA-APP121 – AA-APP172, at AA-APP149.

[61] "Wells Fargo Stable Value Fund," *Wells Fargo,* 2019, p. 4.

[62] Laise, E., "'Stable' Funds in Your 401(k) May Not Be," *The Wall Street Journal*, March 26, 2009. Accessed July 1, 2020, <https://www.wsj.com/articles/SB123802645178842781>.

[63] Doherty, J., "Don't Judge This Strategy by Its Name," *Barron's*, April 6, 2009. Accessed July 1, 2020, <https://www.barrons.com/articles/SB123880705647288919>.

value funds had fallen below their book value due to the economic turmoil experienced during the financial crisis.[64] If any of the contractual exclusions to wrap coverage were applicable in these instances, investors in these funds could have lost money.

53. There are other ways that stable value fund investors can lose money. Whereas the "guarantee" provided by a credit union is one backed by the full faith and credit of the United States government, a stable value fund's "guarantee" is only as good as the creditworthiness of the private company issuing it. These private companies can and do fail. For example, in the early 1990s, the Executive Life Insurance Company – which backed GICs in a number of pension plans – collapsed due to its exposure to the junk market.[65] The company's failure – as well as the failure of GIC providers Confederation Life Insurance Company and Mutual Benefit Life Insurance Company – put at risk investors holding GICs issued by those companies.[66]

54. Another example is AIG which, prior to being bailed out by the federal government in 2008, was the issuer of approximately $38 billion of stable value wrap contracts.[67] The Federal Reserve Bank of New York found had AIG not been rescued by the government, "the consequences and effects could have been severe" and "[w]orkers whose 401(k) plans had purchased guarantees in the form of stable-value contract from AIG could have

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[64] "Advisory Council Report on Stable Value Funds and Retirement Security in the Current Economic Conditions," *United States Department of Labor*. Accessed July 1, 2020, <https://www.dol.gov/agencies/ebsa/about-ebsa/about-us/erisa-advisory-council/2009-stable-value-funds-and-retirement-security-in-the-current-economic-conditions>

[65] "Stable Value FAQ," *Stable Value Investment Association*, 2013. Accessed July 1, 2020, <https://stablevalue.org/media/misc/Stable_Value_FAQ.pdf>, p. 3

[66] "GICs: As Safe as Seller is Stable," *Pensions & Investments*, October 19, 1998. Accessed on July 7, 2020, <https://www.pionline.com/article/19981019/PRINT/810190730/gics-as-safe-as-seller-is-stable>.

[67] "The AIG Rescue, Its Impact on Markets, and The Government's Exit Strategy," *Congressional Oversight Panel*, June Oversight Report, June 10, 2010. Accessed July 1, 2020, <https://www.gpo.gov/fdsys/pkg/CPRT-111JPRT56698/pdf/CPRT-111JPRT56698.pdf>, p. 55.

lost that insurance."[68] The loss of that insurance could have resulted in participant losses had the funds been unable to obtain wrap coverage from another provider.

55. The inability to replace wrap coverage was a particular concern during the financial crisis. For example, in 2009, the ERISA Advisory Council to the DOL reported that the financial crisis created additional threats for stable value funds, including "shrinking wrap contract capacity, increases in wrap fees, the emergence of a wrap issuer supply driven market, investment portfolio structure changes, tightened wrapper underwriting standards, fund credit uncertainty, and fund crediting rate divergence."[69] The advisory council also reported that "concerns about shrinking capacity of stable value product issuers/providers [... have] made it more difficult to obtain new products or expand existing stable value coverage."[70] Consistent with these statements, a 2012 Vanguard publication notes that during and after the financial crisis, "[c]losures of some stable value funds and capacity restrictions in others have introduced uncertainties to stable value as an option for defined contribution plan participants."[71] Another Vanguard publication reported:

> "Like many asset classes, stable value experienced stress both during and after the global financial crisis of 2007–2009. Limited capacity for stable value investment contracts as a number of wrap issuers exited the stable

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[68] "Actions Related to AIG," *Federal Reserve Bank of New York*. Accessed July 1, 2020, <https://www.newyorkfed.org/aboutthefed/aig>. Mr. King opines that this example has "little relevance" because "none of the AIG wrap contracts ever failed to perform." (King Report, ¶ 25). However, as I note, AIG was rescued by the federal government, which may not happen in all future such instances.

[69] "Advisory Council Report on Stable Value Funds and Retirement Security in the Current Economic Conditions," *United States Department of Labor*. Accessed July 1, 2020, <https://www.dol.gov/agencies/ebsa/about-ebsa/about-us/erisa-advisory-council/2009-stable-value-funds-and-retirement-security-in-the-current-economic-conditions>.

[70] "Advisory Council Report on Stable Value Funds and Retirement Security in the Current Economic Conditions," *United States Department of Labor*. Accessed July 1, 2020, <https://www.dol.gov/agencies/ebsa/about-ebsa/about-us/erisa-advisory-council/2009-stable-value-funds-and-retirement-security-in-the-current-economic-conditions>.

[71] LaBarge, K., "Stable Value Funds: Considerations for Plan Sponsors," *Vanguard*, July 2012.

> value business, rising fees as the remaining issuers gained pricing power, and additional investment restrictions imposed by issuers presented significant challenges to both stable value managers and investors."[72]

56. The risks described above, many of which pertain to periods of economic downturn, may be of particular concern for Plan participants and the Plan Committees in the current economic environment, which has dramatically harmed the financial health of many airlines. The International Air Transport Association has projected that the North America airline industry will record losses of $23 billion in 2020 and that decline in demand will result in continued losses in 2021.[73] These developments illustrate why the Plan Committees and Plan participants could be reasonably concerned about the risk of receiving less than book value for stable value investments.

57. As the above discussion shows, the Credit Union Option has risk advantages over both money market and stable value funds.

C. The Majority of Defined Contribution Plans Offer Money Market Funds, which Indicates that Fiduciaries of the Majority of Plans Have Decided Not to Offer a Stable Value Option as their Plans' Only Capital Preservation Vehicle

58. As discussed above, Plaintiffs argue that the Credit Union Option was an imprudent Plan option, whether or not it was accompanied in the Plan's lineup by a stable value alternative because stable value funds have purportedly provided greater returns in recent years. Plaintiffs also claim that stable value funds have also "outperformed" money market funds.[74] Yet, multiple surveys, including a survey by a stable value fund provider

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[72] Dorfler, M., "Money Market Reform and Stable Value: Considerations for Plan Fiduciaries," *Vanguard*, June 2016, p. 4.

[73] International Air Transport Association, "Economic Performance of the Airline Industry," 2020 Mid-Year Report, pp. 1, 6.

[74] Complaint, ¶¶ 13-14, 16.

cited in the Complaint itself, indicate that a majority of plans offered a money market fund either instead of, or in addition to a stable value fund during the Review Period.

59. **Exhibit 5** extends an exhibit from the Longstaff Class Cert Report and provides the results of several surveys regarding the capital preservation options in defined contribution plans. As the exhibit shows, most such plans offer at least one capital preservation option. The 2015 survey by MetLife that Plaintiffs rely on in their Complaint indicates that 62 percent of surveyed plans included a money market fund in their investment lineups.[75] The exhibit also provides other examples, such as the Deloitte Annual Defined Contribution Benchmarking Survey, which reports that between 73 and 85 percent of plans offered a stable value option and between 53 and 63 percent of surveyed plans offered a money market option over the 2010 to 2019 period.[76] Similarly, according to surveys of plans with over 5,000 participants for which Vanguard is the recordkeeper, between 57 and 75 percent of surveyed plans offered a stable value option and between 63 and 77 percent of surveyed plans offered a money market option over the period from 2011 through 2019.[77]

60. In fact, many of the managers of defined contribution assets offer money market funds in their retirement plans. As shown in **Exhibit 6**, in 2018, seven of the ten largest managers of defined contribution assets offered money market funds in their retirement plans, with three others offering short-term investment grade funds.

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[75] *MetLife*, "2015 Stable Value Study: A Survey of Plan Sponsors, Stable Value Fund Providers and Advisors," 2015, p. 5.

[76] *See* **Exhibit 5**.

[77] *See* **Exhibit 5**.

61. Even the large stable value fund providers offered money market funds to participants of their own retirement plans. For example, Wells Fargo, Vanguard, and T. Rowe Price — the managers of the three largest pooled stable value funds[78] as of 2018 — all offered money market funds in their retirement plans during most of the Review Period.[79] That officials for plans sponsored by the principal asset managers offering pooled stable value funds to the retirement market offered their plan participants a choice of stable value and money market options as capital preservation vehicles provides a strong indication that industry experts do not regard these options as fungible.[80]

62. Thus, Plaintiffs' suggestion that a prudent fiduciary would not have offered a capital preservation vehicle other than a stable value fund runs counter to actual, common fiduciary practice.

D. The Credit Union Option Provided Higher Returns than those Provided by Money Market Funds

63. The Credit Union Option's returns exceeded the returns of similarly liquid money market funds both before and during the Review Period.

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[78] Sarah Max, "No Stomach for Stock-Market Swings? Consider Stable Value Funds," *Barron's*, October 8, 2018, Accessed July 9, 2020, <https://www.barrons.com/articles/no-stomach-for-stock-market-swings-consider-stable-value-funds-1538159332>.

[79] Vanguard offered the Vanguard Prime Money Market Fund from 2010 through 2018. T. Rowe Price offered the T. Rowe Price U.S. Treasury Money Market Fund or the T. Rowe Price U.S. Treasury Money Market Trust Fund from 2010 through 2018. Wells Fargo offered the Wells Fargo 100% Treasury Money Market Fund from 2011 through 2018. *See* T. Rowe Price U.S. Retirement Program Form 5500 Schedule of Assets (2010-2018); The Vanguard Retirement and Savings Plan Form 5500 Schedule of Assets (2010-2018); Wells Fargo & Company 401(K) Plan Form 5500 Schedule of Assets (2011-2018).

[80] Among these providers, T. Rowe Price and Wells Fargo's affiliate Galliard Capital Management are identified as members of the Stable Value Investment Association, an organization on which Mr. King served as chairman of the board. "SVIA Members," *Stable Value Investment Association*. Accessed July 12, 2020, <https://www.stablevalue.org/about-svia/member-companies>; King Report, Exhibit A.

64. The Plan's quarterly report for first quarter of 2010 provides the returns to the Credit Union Option over the three- and five-year periods ending March 31, 2010.[81] As shown in **Exhibit 7**, the Credit Union Option's returns exceeded the returns of 99 percent of money market mutual funds over the three-year period ending Q1 2010 and 94 percent of money market mutual funds over the five-year period ending Q1 2010. Moreover, as shown in the same exhibit, over these three- and five-year periods, the returns to the Credit Union Option exceeded the returns of at least 99 percent of government and Treasury money market funds and the Credit Union Option's returns also exceeded the returns of at least 90 percent of money market mutual funds with assets of $1 billion or more.

65. Additionally, **Exhibits 8A** and **8B**, updated versions of analyses included in the Longstaff Class Cert Report, show that during the Review Period the annual returns of the Credit Union Option exceeded those of 85 to 99 percent of money market mutual funds.[82]

66. Given that, as discussed above, many prudent fiduciaries offered money market funds that offered lower returns than the Credit Union Option (without any benefits over that option in terms of liquidity and risk), it is reasonable to infer that those fiduciaries would have found the Credit Union Option to be prudent.

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[81] *See, e.g.,* "American Airlines Employee Benefit Plans, 1st Quarter 2010," *American Beacon Advisors*, June 3, 2010, AA-MAIN-000000146 – AA-MAIN-000000179 at AA-MAIN-000000161.

[82] I find consistent results if I include only government money market mutual funds in my peer group. As shown in **Exhibit 8C**, the Credit Union Option's annual returns exceeded the returns of 95 to 99 percent of government and Treasury money market mutual funds over the 2010 to 2017 period. Moreover, the Credit Union Option also outperformed money market mutual fund accounts most likely to be held in other defined contribution plans. As shown in **Exhibit 8D**, the Credit Union Option's annual returns exceeded the returns of 83 to 99 percent of money market mutual fund accounts over the 2010 to 2017 period when limiting to funds with $1 billion or more in assets under management.

E. The Credit Union Option also Provided Higher Returns than Most Other Demand Deposit Accounts

67. Not only did the Credit Union Option's returns exceeded those of money market funds, but they also exceeded the returns of other banking and credit union products during the Review Period.

68. Specifically, over the Review Period, the returns of the Credit Union Option compared favorably to the returns of money market mutual funds as well as to other banking and credit union products.[83]

a. The annual returns of the Credit Union Option <u>exceeded the returns of 84 to 99 percent of credit union savings accounts</u> (*see* **Exhibit 9**).

b. The annual returns of the Credit Union Option <u>exceeded the returns of 78 to 99 percent of credit union money market accounts</u> (*see* **Exhibit 10**).

c. The annual returns of the Credit Union Option returns <u>exceeded the returns of 83 to 99 percent of bank savings accounts</u> (*see* **Exhibit 11**).

d. The annual returns of the Credit Union Option <u>exceeded the returns of 87 to 99 percent of bank money market accounts</u> (*see* **Exhibit 12**).

69. Across all comparison groups and years in **Exhibits 9** through **12**, the Credit Union Option returns compared favorably to the returns for each of these products. In fact, these exhibits show that the Credit Union Option's returns were higher than the returns of at least 78 percent of the options in each comparison.

70. Additionally, Plaintiffs' complaint alleges that the AA Credit Union paid a higher interest rate to certain checking account customers than that paid by the Credit Union Option.[84]

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[83] These exhibits are revised versions of analyses that appeared in the Longstaff Class Cert Report. They rely on data from S&P Global Market Intelligence, the same source the NCUA uses on its website to compare credit union and bank interest rates. *See* National Credit Union Administration, "Credit Union and Bank Rates." Accessed July 2, 2020, <https://www.ncua.gov/analysis/cuso-economic-data/credit-union-bank-rates>.

[84] Complaint, ¶ 20 ("[T]he AA Federal Credit Union has an actual checking account option called a 'Priority' checking account that, according to the AA Federal Credit Union Internet site, is currently paying interest rates of up to 2.27%.").

However, this presents a false comparison. While it is true that at the time the Complaint was filed in 2016 the AA Credit Union offered such a checking account with a 2.27 percent interest rate, this is not the interest rate that most participants would have earned had their Credit Union Option balances been invested in a Priority Checking Account.

71. The 2.27 percent interest rate that Plaintiffs cite for the Priority Checking account only applied to balances of up to $5,000.[85] As of December 2016, balances over $5,000 earned a 0.05 percent annual percentage yield ("APY").[86] As **Exhibit 13** (reproduced from the Longstaff Class Cert Report) shows, 60.4 to 66.2 percent of Participants invested in the Credit Union Option had more than $5,000 invested in the Credit Union Option. Furthermore, on average, participants who invested in the Credit Union Option invested $34,382 to $48,720 in the option, and 89.4 to 92.1 percent of Plan assets invested in the Credit Union Option were above the $5,000 per participant threshold.

72. **Exhibit 14**, also reproduced from the Longstaff Class Cert Report, calculates the effective rate that the Plan would have received had the balance of the Credit Union Option been invested in the AA Credit Union Priority Checking account. The effective rate is calculated using the respective prevailing APYs on balances up to $5,000 and on balances above $5,000. As this analysis shows, this effective annualized rate was lower than or similar to the annual realized returns provided by the Credit Union Option, and

[85] "Rate Schedule," *American Airlines Credit Union*, December 1, 2016. Accessed July 1, 2020, <https://web.archive.org/web/20161214023437/https://www.aacreditunion.org/pdf/rateandfee-fulldoc.pdf>, p. 1. As of July 1, 2020, the equivalent rate is currently 0.75 percent. ("Rate Schedule," *American Airlines Credit Union*, July 1, 2020. Accessed July 2, 2020, <https://www.aacreditunion.org/49e9b2/globalassets/documents/rateandfee-rates.pdf>, p. 1.

[86] Declaration of Lewis Cohen, June 26, 2020, ¶ 11; "Rate Schedule," *American Airlines Credit Union*, December 1, 2016. Accessed July 1, 2020, <https://web.archive.org/web/20161214023437/https://www.aacreditunion.org/pdf/rateandfee-fulldoc.pdf>).

the latter was often much higher. For example, as of December 2017, the annual effective rate had the Plan been invested in the checking account would have been 0.24 percent, while the return on the Credit Union Option for that year was 0.94 percent.

73. These analyses further underscore that the interest rate paid by the Credit Union was reasonable, despite the high teaser rate offered on the Priority Checking account.

V. MR. KING'S CONTENTION THAT STABLE VALUE FUNDS ARE CATEGORICALLY SUPERIOR TO VEHICLES LIKE THE CREDIT UNION OPTION (AND MONEY MARKET FUNDS) IGNORES THE LIQUIDITY AND SECURITY ADVANTAGES THAT HAVE MADE THE LATTER VEHICLES POPULAR WITH DEFINED CONTRIBUTION PLAN FIDUCIARIES

74. Mr. King argues that stable value funds are superior to money market funds "and by extension superior to the [Credit Union Option]."[87] However, Mr. King ignores that stable value funds are less liquid than the Credit Union Option and money market funds and are riskier than the Credit Union Option. Furthermore, multiple surveys, including the MetLife survey on which Mr. King relies to tout the prevalence of stable value funds, show that the majority of defined contribution plans offer money market funds in their investment lineups. Given the advantages of the Credit Union Option over money market funds, Mr. King has offered no reliable basis to conclude that, given access to the Credit Union Option, a reasonable fiduciary or other investor would view the Credit Union Option as an inappropriate investment alternative.

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[87] King Report, ¶ 12.

A. The Credit Union Option Offers Distinct Advantages over Stable Value Funds in Terms of Both Greater Liquidity and Lower Risks

75. Plaintiffs' criticism of the Credit Union Option appears to be that the Credit Union Option provided "dramatically lower investment returns than other readily available capital preservation investments, including stable value funds."[88] However, stable value funds are the *only* capital preservation investment that Plaintiffs or their expert, Mr. King, have identified as having provided greater returns than the Credit Union Option during the relevant time period.

76. But, while stable value funds may have provided higher investment returns in recent years, that does not mean that they are or were superior investment alternatives to the Credit Union Option or to other capital preservation options such as money market funds.

1. Mr. King Ignores the Liquidity Disadvantages of Stable Value Funds

77. As discussed above, stable value contracts generally contain an equity wash provision which prohibits participants from transferring assets directly to competing funds and often requires a put option that restricts plan fiduciaries' ability to remove a stable value fund from a plan investment lineup.

78. Mr. King dismisses the equity wash provision as "an industry standard provision protecting the long-term interest and protecting participants remaining in the stable value option."[89] The fact that the provision exists for a reason and is an industry standard in no way means that the provision does not reduce liquidity. He also inaccurately describes the provision, writing that "[e]quity wash prohibits transfer of funds back into a stable

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[88] Order Re Plaintiffs' Trial Experts, *Salvadora Ortiz and Thomas Scott v. American Airlines Inc., The American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union*, June 15, 2020, p. 4.

[89] King Report, ¶ 27.

value fund after having transferred into a competing fund for 90 days" and says this provision is "very similar to the protections that virtually all plans have regarding the frequent trading of virtually all funds in their plans."[90] However, this statement is incorrect.

79. First, as mentioned above, the equity wash provision restricts transfers *from* the stable value option *into* competing funds, not *from* competing funds *back into* the stable value option; the provision means that any investor balances withdrawn from the stable value fund must be put at risk of market fluctuations in other options for three months before they can be returned to any *other* capital preservation or low-risk option. Second, while it is true that the Plan's summary plan descriptions effective in 2010 and 2012 do describe a restriction for many of the investment options limiting the ability to transfer *out of* and *back into* an option within 90 days, the document indicates that this restriction — which again is distinct from an equity wash provision — did not apply to the Credit Union Option.[91] Furthermore, the Plan's 2015 investment guide mentions no restrictions other than the equity wash provision pertaining to stable value option along with a restriction related to investments in the company's stock.[92]

80. Mr. King also indicates that the Plan could have avoided the put option by including an individually-managed stable value fund, under which "the plan sponsor has possession of

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[90] King Report, ¶ 27.

[91] "Summary Plan Description for $uper $aver, a 401(k) Capital Accumulation Plan for Employees of Participating AMR Corporation Subsidiaries," *American Airlines*, July 2009 and effective August 24, 2010, AA-APP006 – AA-APP048, at AA-APP020-021; "Summary Plan Description for $uper $aver, a 401(k) Capital Accumulation Plan for Employees of Participating AMR Corporation Subsidiaries," *American Airlines*, July 2009 and effective November 1, 2012, AA-MAIN-0000068249-298 at AA-MAIN-0000068270-271.

[92] American Airlines, Inc. 401(k) Plan / US Airways, Inc. Employee Savings Plan, "Time to learn: Investment Details Guide," October 2015, AA-APP121 – AA-APP172.

the assets in trust, can migrate the assets to a successor manager and maintain, replace or renegotiate its wrap contracts."[93]

81. But, based on my interview with Kenneth Menezes, American Airlines' Managing Director of Asset Management, I understand that at least twice in the past the Plan fiduciaries considered the possibility of adding an individually-managed stable value option and found it to be infeasible for the Plan. According to Mr. Menezes, the Plan initiated a request for proposal for a stable value option in 2017 and considered proposals from stable value providers offering individually-managed stable value fund options. Based on historic trading data for the Plan, Plan officials advised the providers that the option could face withdrawals of as much as $100 million over the span of a few days. The stable value option candidates responded that they could not ensure that participants would receive book value under those conditions through an individually-managed stable value fund vehicle and recommended a pooled vehicle as a more appropriate form of stable value fund for the Plan. I further understand that the Plan again investigated the use of an individually-managed stable value fund vehicle more recently and again received feedback that such a vehicle would be unsuitable for the Plan given the Plan's trading volatility.[94]

82. Moreover, even if an individually-managed stable value option were feasible for the Plan, such products are subject to their own risks. One such risk is that market conditions can

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[93] King Report, ¶ 5.e.

[94] Notes of July 10, 2020 Telephone Interview of Ken Menezes (Managing Director of Asset Management, American Airlines, Inc.), July 10, 2020. This discussion of the volatility of the plan's cash flows is consistent with the testimony of Lewis Cohen, the Vice President Finance & Analytics of the AA Credit Union. In his declaration, Mr. Cohen indicated that the AA Credit Union "largely holds the Plan assets in cash reserves and short-term investments to meet the liquidity needs of Plan participants because of the sometimes volatile flow of Plan assets." (Declaration of Lewis Cohen, June 26, 2020, ¶ 13).

also limit the availability of wrap insurance. Such scarcity of wrap insurance occurred during and after the financial crisis, as discussed above.

83. Finally, an individually-managed account is only one type of stable value option, and Mr. King does not dispute that types of stable value options other than individually-managed accounts can be subject to the put option.

2. Mr. King Misleadingly Downplays Many of the Risks of Stable Value Investments

84. Mr. King also downplays many of the risks to which investors in stable value funds are exposed but to which investors in the Credit Union Option are not. As discussed, there are situations in which participants who withdraw their assets from a stable value fund may receive less than book value. These situations include:

> Corporate-initiated events—which are employer-driven events, such as an early retirement program, layoff, or bankruptcy—are also typically not covered. Corporate-initiated events generally cause withdrawals en masse from a stable value fund. These withdrawals can negatively impact investors and plans that choose to remain in the fund.[95]

85. Mr. King does not dispute these risks. To the contrary, he states, "[s]table value wrap contracts typically have book value corridors that require plan-initiated events that would be expected to trigger unexpectedly large withdrawals from the fund, such as a layoff or early retirement program, to pay participants at book value."[96] A book value corridor refers to the threshold up to which the wrap insurance will cover withdrawals at book

[95] "Retirement Plan Products and Services," *Office of the Comptroller of the Currency*, Comptroller's Handbook AM-RPPS, Version 1.0, February 2014. Accessed July 9, 2020, <https://www.occ.treas.gov/publications/publications-by-type/comptrollers-handbook/retirement-plan-products-services/pub-ch-retirement-plan.pdf>, p. 34.

[96] King Report, ¶ 5.f.

value.[97] However, Mr. King himself notes that "book value corridors typically are for 10% to up to 20% of the fund in my experience."[98] In effect, he is assuming that the "large withdrawals" would be limited to as little as 10 percent of the fund. It is not surprising that wrap insurance does not cover larger withdrawals. As even the Stable Value Investment Association ("SVIA") notes, "the cost for insurance against such events would be prohibitive."[99]

86. Mr. King further asserts that, in the context of an individually-managed stable value fund, a Plan Sponsor could work with the stable value fund manager to increase fund liquidity to help meet withdrawals at book value.[100] But this again incorrectly assumes that the Plan could have obtained a suitable individually-managed stable value fund given the Plan's trading volatility. Moreover, from an economics perspective, this opinion makes no sense. When the market value of assets in a plan are below book value, liquidating the assets in order to pay book value to certain participants does not somehow increase market value. In fact, it locks in the losses, and leaves the remaining stable value investors with even bigger percentage gaps between book and market values.

87. In his report, Mr. King also dismisses the risks associated with stable value fund wrap providers, in particular, AIG, saying the example has "little relevance" because "none of

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[97] Fabozzi, Frank J., ed. *The Handbook of Stable Value Investments*. Vol. 38. John Wiley & Sons, 1998, p. 142 ("most wrappers cover [participant withdrawals due to employer-related events] at book value only up to a threshold (typically called a corridor) specified in the contract.").

[98] King Report, ¶ 5.f.

[99] "Stable Value FAQ," *Stable Value Investment Association*, 2013. Accessed July 1, 2020, <https://stablevalue.org/media/misc/Stable_Value_FAQ.pdf>, p. 2.

[100] King Report, ¶ 5.g.

the AIG wrap contracts ever failed to perform."[101] However, the AIG wrap contracts performed due to the rescue of AIG by the federal government acting in response to a global financial crisis. There is no guarantee that the government would bail out other wrap providers who get into financial trouble.

88. Mr. King likewise attempts to dismiss other examples of the risks associated with stable value funds I discuss above as having "little relevance here,"[102] and attempts to downplay the significance of these instances because they include a "non-qualified fund (Chrysler) and some guaranteed investment contracts, both of which are outside the protection of ERISA-regulated defined contribution plans."[103] He does not, however, identify any "protection" relating to ERISA-regulated defined contribution plans that would render such plans immune to the losses incurred in the cited examples. The risks of the stable value investments in those examples would be the same regardless of whether the investments appeared in a defined contribution plan or elsewhere. Thus, the examples are indicative of the risks inherent to all investors in stable value funds, whether through defined contribution plans or otherwise.

B. Plaintiffs' Contention that it was Imprudent to Offer the Credit Union Option (or a Money Market Option) in the Plan Is Inconsistent with Common Fiduciary Practice

89. As discussed, Mr. King quotes a law review article that asserts, "'[t]he choice of a money market fund instead of a Stable Value Fund meaningfully decreases Participant wealth

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[101] King Report, ¶ 25.

[102] King Report, ¶¶ 23-24.

[103] King Report, ¶ 24.

and is a clear violation of a Plan Sponsor's duty to select options as a prudent expert'"[104] and that this applies to the Credit Union option "[b]y extension."[105] He then opines that "Stable Value is absolutely superior to Money Market (and by extension superior to the [Credit Union Option]), as any reasonable due diligence process would make clear."[106] Mr. King, in other words, opines that money market funds are imprudent options for defined contribution plans; the Credit Union Option is similar to money market funds, and thus, the Credit Union Option is also imprudent. Yet, Mr. King's opinions are contradicted by the decisions of the majority of defined contribution plans, which offer a money market fund in their investment lineups.

90. For example, the 2017 MetLife study cited by Mr. King found that 52 percent of defined contribution plans offered a money market fund.[107] This is corroborated by other sources, as shown in **Exhibit 5** and discussed above.[108]

91. In fact, as Mr. King testified in another matter regarding his experience at Prudential, a recordkeeper may require retirement plans on its platform to include the recordkeeper's

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[104] King Report, ¶ 11, quoting Paul J. Donahue, Plan Sponsor Fiduciary Duty for the Selection of Options in Participant-Directed Defined Contribution Plans and the Choice Between Stable Value and Money Market, 39 *Akron L. Rev*. at p. 33 (2006).

[105] King Report, ¶ 11.

[106] King Report, ¶ 12.

[107] In 2015, the MetLife survey found 62 percent of surveyed plans included a money market fund in their investment lineups. The decrease in the percentage of plans offering money market funds could be a result of the regulatory changes to money market funds that went into effect in 2016 that I discussed above. *MetLife*, "2015 Stable Value Study: A Survey of Plan Sponsors, Stable Value Fund Providers and Advisors," 2015

[108] Mr. King does cite a study by Aon Hewitt that shows that lower percentages of plans offered money market funds than the surveys cited in **Exhibit 5**. In particular, it shows that in 2011, 2013, and 2015, 42, 39, and 40 percent of plans, respectively, offered money market funds. However, even this outlier still shows that a substantial percentage of plans held money market funds. King Report, ¶ 4; *Aon Hewitt*, "AHIC Stable Value Quarterly," June 30, 2017, p. 15.

own stable value fund as a plan option.[109] Thus, it is possible that the popularity of stable value funds — as Mr. King tried to argue by citing various statistics — may partly be a result of recordkeepers' requirements, instead of plan sponsors' conclusion that a stable value fund is a superior option in its own right.

92. The Plan's offering of capital preservation vehicles other than a stable value option during the period of 2010 to 2014 was consistent with the practices of many other plans. In fact, Mr. King himself reports that 22.2 percent of plans, or approximately one out of every four plans, did not offer a stable option from 2009 to 2015.[110]

93. Mr. King also ignores that by offering both a stable value fund and another capital preservation vehicle, the Plan's post-merger investment menu was consistent with the lineups of many of other plans. For example, as discussed above and shown in **Exhibit 5,** the MetLife Stable Value Study cited by Mr. King reports that 45 and 36 percent of plans offered both a stable value and money market funds in 2015 and 2017, respectively.

94. Although relatively few plans have offered credit union demand accounts, this is unsurprising given the regulatory restrictions on who can participate in credit unions. As discussed above, compared to money market funds, the Credit Union Option provided greater security, higher returns, and similar liquidity during the Review Period. Mr. King identifies no disadvantage to the Credit Union Option relative to money market funds. Thus, there is no basis to infer that the fiduciaries of plans that offered money market

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[109] "[A] stable value fund was a requirement to be on the Prudential recordkeeping platform." Deposition of James J. King, *Bell, et al. v. ATH Holding Company, et al.*, 1:15-cv-02062-TWP-MPB, #Dkt 261-1, at 58:4-5.

[110] King Report, ¶ 4.

funds would have viewed the Credit Union Option as anything other than a reasonable plan investment option for the Plan.

95. In summary, Mr. King's contention that it was imprudent to offer a money market option (and, by extension, the Credit Union Option) is not consistent with the practices of other defined contribution plans.

VI. MR. KING'S OPINIONS RELATED TO DAMAGES AND SUPPOSED HARM TO THE PLAINTIFFS ARE FUNDAMENTALLY FLAWED

96. As discussed above, Plaintiffs appear to contend that it would have been improper to offer the Credit Union Option as an investment alternative, regardless of whether other capital preservation options, including a stable value fund, were offered.

97. Consistent with this formulation, Mr. King contends that Defendants "should have removed the [Credit Union Option] from the Plan and mapped the Plan assets invested with the Credit Union to a prudent stable value option."[111] Although Mr. King does not state when such a mapping should have occurred, he presumably believes it should have taken place at the beginning of the Review Period.

98. Mr. King's damages analysis, moreover, assumes that participants would have kept any amounts mapped from the Credit Union Option to a stable value fund option in that option, that all participant investments that were in the Credit Union Option at any point during the 2010 to 2017 period would have instead been invested exclusively in its replacement capital preservation option, and that no other investment allocations would be affected. That is, he assumes that, once investments that were mapped to the stable value option in 2010, all Plan participants (including those who were not yet in the Plan

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[111] King Report, ¶ 41.

as of 2010) would have then behaved no differently than they actually did in terms of new contributions, withdrawals, and reallocations. The only difference would be that any investments in the Credit Union Option would have been invested in the stable value option instead. Mr. King, however, provides no reliable basis for this assumption, which is based purely on speculation, both as to Named Plaintiffs and other participants.

A. Whether the Named Plaintiffs Incurred Harm under Plaintiffs' Theory Is a Matter of Speculation

99. Mr. King's analysis is based on the assumption that the Named Plaintiffs would have viewed the stable value fund as a suitable replacement for the Credit Union Option, and that their hypothetical allocations to a stable value option would have perfectly matched their actual allocations to the Credit Union option is undermined by the Named Plaintiffs' actual conduct. That is, Mr. King's analysis is based on his speculation that, despite their complete rejection of the Plan's stable value option when both the Credit Union Option and a stable value fund were available, if a stable value fund had been the only capital preservation vehicle available, then Named Plaintiffs would have invested in the stable value fund in the same amounts and with the same timing as they actually invested in the Credit Union Option.

100. As discussed above, the Plan offered a stable value fund option beginning in fall 2015. But, in my review of Named Plaintiffs' transaction activity, I found that neither Ms. Ortiz nor Mr. Scott allocated any portion of their accounts to that stable value option.

101. Ms. Ortiz held $16,859 in the Credit Union Option at the beginning of the Review Period.[112] Ms. Ortiz had invested approximately $23,000 in the Credit Union Option in

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[112] "American Airlines Retirement and Stock Plans – Salvadora P. Ortiz," *J.P. Morgan Retirement Plan Services and Empower Retirement*, January 1, 2010–December 31, 2015, p. 6.

October 2015, at which point a stable value option was added to the Plan lineup. Despite this, Ms. Ortiz retained her holdings in the Credit Union Option until August 2016, six months after the complaint in this matter was filed, at which point she left the Plan.[113] At no point did she invest in the Plan's stable value options.

102. Mr. Scott, in turn, had $368,591 invested in the Credit Union Option as of the beginning of the Review Period.[114] By the time the money market and stable value options were added to the Plan lineup during the Plan Merger in October 2015, his Credit Union Option balance had dropped to $55.80.[115] At that time, he transferred the $55.80 invested in the Credit Union Option (together with over $32,000 from other Plan investment options) to the money market option.[116] Then, in September 2016, a week prior to the previously-announced removal of the money market option offered by the Plan, he moved his balance remaining in the money market option (approximately $300) back into the Credit Union Option.[117] The following month, Mr. Scott once again transferred his balance in the Credit Union Option, this time moving to the US Small/Mid Cap Stock Fund.[118] As of April 4, 2018, his account was allocated across the brokerage account option, the US Small/Mid Cap Stock Fund, and the US Large Cap Value Stock Fund.[119]

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[113] "Retirement Savings Statement, American Airlines, Inc. 401(k) Plan – Salvadora Ortiz," *Fidelity Investments*, October 28–November 2, 2015, p. 2; "Ortiz trans history thru 08-05-2016.xlsx."

[114] American Airlines Plan Participant Data; "American Airlines Retirement and Stock Plans – Thomas W. Scott," *J.P. Morgan Retirement Plan Services and Empower Retirement*, January 1, 2010–December 31, 2015, p. 2.

[115] "Retirement Savings Statement, American Airlines, Inc. 401(k) Plan – Thomas Scott," *Fidelity Investments*, October 28–November 2, 2015, p. 2; "Scott trans history thru 04-04-2018.xlsx."

[116] "Retirement Savings Statement, American Airlines, Inc. 401(k) Plan – Thomas Scott," *Fidelity Investments*, October 28–November 2, 2015, pp. 2-3.

[117] Scott Dep., at 98:4-12; "Scott trans history thru 04-04-2018.xlsx."

[118] "Scott trans history thru 04-04-2018.xlsx."

[119] "Scott trans history thru 04-04-2018.xlsx."

Like Ms. Ortiz, he never invested in the Plan's stable value option. In fact, he testified in deposition that he had "never looked at a stable value fund."[120]

103. Ms. Ortiz and Mr. Scott failed to make any use whatsoever of the Plan's stable value option after it was added to the Plan's investment lineup. Their lack of investment in the Plan's stable value fund demonstrates that it is speculative, at best, for Mr. King to assume that all participants who had invested in the Credit Union Option would have utilized a stable value option had one been introduced as a replacement for the Credit Union Option at an earlier time.

104. Mr. King attempts to explain away Plaintiffs' behavior, and that of other Plan participants who avoided the Plan's stable value options, by speculating that "[t]here may have been structural impediments embedded in the restructuring that would have required participants to take specific action related to the principal protection asset class" and that "[p]articipants are infamous for not taking action."[121] But, even setting aside that Mr. King has identified no such structural impediment, the Plaintiffs did take action. They just never took action reflecting any desire to be invested in the Plan's stable value option.

105. Mr. Scott affirmatively reallocated his account multiple times, including transferring monies into the Plan's money market fund option — which, again, Mr. King contends was inferior to a stable value fund for the same reasons as the Credit Union Option — and moving monies back to the Credit Union Option just before the money market fund

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[120] Scott Dep., at 85:6.

[121] King Report, ¶¶ 40, 42

option was removed from the Plan.[122] Mr. Scott, moreover, made the latter move after filing the present lawsuit and thus presumably did so with an awareness of the stable value option and its supposed advantages over the Credit Union Option.

106. Ms. Ortiz likewise took action in the form of a filing a lawsuit seeking to represent a class based on the theory that the Credit Union Option was imprudent. In light of that affirmative conduct, it is illogical to attribute her failure to divest herself from the Credit Union Option and reallocate to the Plan's stable value alternative to the supposed tendency of the average participant to not take action.

107. In addition, Mr. King's analysis is based on the further speculation that had a stable value fund been added to the Plan prior to the Plan merger, then neither Named Plaintiff would have moved assets to the stable value fund from investments with higher returns. For example, Mr. King assumes that the addition of a stable value fund to the plan would not lead the Named Plaintiffs to shift investments from the American Beacon High Yield Bond Option into the stable value fund.[123]

108. Mr. King's damages theory with respect to Mr. Scott and Ms. Ortiz also requires him to assume that any reasonable fiduciary would not only have removed the Credit Union Option, but would have replaced the Credit Union Option solely with a stable value option and not a money market fund or a combination of a money market fund option and

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[122] "American Airlines Retirement and Stock Plans – Thomas W. Scott," *J.P. Morgan Retirement Plan Services and Empower Retirement*, January 1, 2010–December 31, 2015; "Scott trans history thru 04-04-2018.xlsx."

[123] For example, from 2012 to 2014, years during which Mr. Scott held the American Beacon High Yield Bond Option, the annualized return of that option was 7.49 percent, while the annualized return of Mr. King's stable value returns was 2.21 percent. "American Airlines Retirement and Stock Plans – Thomas W. Scott," J.P. Morgan Retirement Plan Services and Empower Retirement, January 1, 2010–December 31, 2015; "American Airlines Employee Benefit Plans, 4th Quarter 2014," *American Beacon Advisors*, March 16, 2015, AA-MAIN-000000306 – AA-MAIN-000000330 at AA-MAIN-000000327; King Report, July 6, 2020, Exhibit 1.

a stable value fund. This is particularly key given Mr. Scott's demonstrated preference for the money market fund option over a stable value fund option when both options were available. On the one hand, Mr. King's assumption that the Plan's fiduciaries would have replaced the Credit Union Option with a stable value option and no money market fund alternative is consistent with his suggestion that the Credit Union Option and money market funds were imprudent for the same reasons.[124] But it places Mr. King's assumption as to what reasonable fiduciaries would do directly at odds with what the fiduciaries of many — and, according to multiple surveys, most — defined contribution plans actually did (including, as discussed above, the plans sponsored by many of the largest managers of defined contribution assets and major stable value providers).[125]

109. Finally, even if the Plan's fiduciaries had replaced the Credit Union Option with a stable value fund and only a stable value fund in the Plan's investment lineup, Mr. King's damages calculations ignore that one or more money market fund options would have been available through the Plan's brokerage window.[126] Indeed. Mr. Scott transferred a substantial portion of his account into a money market fund within the brokerage window for several months — beginning around the time when the stable value fund was added to the Plan's lineup.[127]

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[124] King Report, ¶¶ 11-12.

[125] *See* **Exhibits 5** and **6**.

[126] Scott Dep., at 38:22-25.

[127] Scott Dep., at 32:2-21; Scott Dep., Exhibits 1-2.

B. Mr. King's Plan-Wide Damages Are Speculative

110. Just as Mr. King's assertion that Ms. Ortiz and Mr. Scott incurred harm depends on multiple layers of speculation, his calculation of Plan-wide damages is conjectural as well.

1. Mr. King Incorrectly Assumes that All Assets Invested in the Credit Union Would Have Been Invested in a Stable Value Fund Had the Credit Union Option Not Been in the Plan Lineup

111. Since the introduction of the stable value option to the Plan's lineup in October 2015, participants have overwhelmingly favored the Credit Union Option to that alternative, allocating at least three times as much to the Credit Union Option as to the stable value option at all points in time.[128] Such a lopsided allocation across participants suggests that many participants did not view the Credit Union Option and the stable value option as equally preferable alternatives. Nor can this demonstrated preference for the Credit Union Option be written off as participant investment inertia, as Mr. King suggests.

112. For example, an analysis included in the Longstaff Class Cert Report that focused on the behavior of participants that joined the Plan for the first time after a stable value option was introduced is informative. There were 754 participants who joined the Plan after the Plan merger and held a capital preservation options as of the end of their first quarter in the Plan. At the end of their first quarter in the Plan, 640 of these 754 participants held the Credit Union Option (84.9 percent); 162 held the stable value option (21.5 percent), and 66 held the FIMM (8.8 percent) (*see* **Exhibit 15**, reproduced from the Longstaff Class Cert Report). In other words, the participants who *joined* the Plan when there were both the Credit Union Option and a stable value option available were four times more

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[128] *See* **Exhibit 4A**.

likely to select the Credit Union Option than the stable value option. Because these were new participants, Mr. King's opinion that "[p]articipants are infamous for not taking action"[129] is not relevant, as these investment selections pertained to participants' initial investments.

113. The speculative nature of Mr. King's assumption is further demonstrated by the manner in which participants behaved when the Plan's money market fund option, the FIMM, was removed from the Plan's lineup. As illustrated in **Exhibit 16**, which is an updated version of an exhibit in the Longstaff Class Cert Report, when the FIMM was removed from the Plan in Q3 2016, 89.7 percent of participants allowed their investments in the fund to be transferred by default to the Plan's target date fund options. Additionally, 2.1 percent of participants affirmatively decided to transfer their assets to the Credit Union Option, while only 1.0 percent of participants moved their assets to the Plan's stable value option, the MIP II. At least 5.4 percent of participants moved at least a portion of their assets into various other Plan options, as the exhibit shows.[130] Not only did more than twice as many participants select the Credit Union Option over a stable value fund alternative, but an overwhelming number of participants had their accounts transferred to a non-capital preservation alternative rather than the stable value fund.

114. Mr. King would presumably claim that these revealed preferences of Plan participants are not dispositive because "[p]articipants are infamous for not taking action."[131] But, as the data in **Exhibit 16** show, approximately seven percent of participants made an

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[129] King Report, ¶ 42. *See also* King Report, ¶¶ 43-47.

[130] There are also 3.6 percent of participants where I am unable to trace their reallocation. This situation arises when they transfer assets out of more than one option and into more than one other option during Q3 2016, and the transfers do not involve matching dollar amounts.

[131] King Report, ¶ 42. *See also* King Report, ¶¶ 43-47.

affirmative decision to reallocate at least a portion of their assets to Plan options other than the stable value fund. And, even more tellingly, more than five percent of participants allocated away to non-capital preservation options when their chosen capital preservation option was removed. Given this actual participant behavior, Mr. King's assumption that participants would have uniformly accepted investment in less desired capital preservation option simply because they could no longer invest in the Credit Union option is not only conjectural; it is counterfactual.

115. In addition, as with Mr. King's damages calculations for Mr. Scott and Ms. Ortiz, his calculation of harm to other participant accounts depends on other speculative assumptions, including an assumption that the Plan's fiduciaries would not have followed the common fiduciary practice of offering a money market fund alternative, either as the sole capital preservation option or in addition to a stable value fund. Notably, as **Exhibit 15** shows, 8.8 percent of new participants invested in the money market option, even with both the Credit Union Option and a stable value fund available as Plan options.

2. Mr. King Ignores that Some Participants May Have Realized Lower Returns Had a Stable Value Fund Been Included in the Plan Lineup Prior to the Plan Merger

116. Mr. King ignores the likelihood that, if a stable value fund had been offered in the Plan in place of the Credit Union Option, some participants would have reallocated assets that would have been invested in other higher risk, higher return Plan options to the stable value option. Such reallocations, in fact, happened when a stable value fund was added to the Plan after the Plan Merger. This participant behavior was consistent with modern portfolio theory, which describes how an investment's risk and return characteristics cannot be considered in isolation, but rather should be evaluated in the context of an

entire portfolio.[132] In other words, when an investment option is added to a plan, participants may reallocate their investment to achieve their desired risk return portfolio.

117. Consistent with modern portfolio theory, data from the Employee Benefit Research Institute ("EBRI") similarly show that the asset allocations in plans with stable value options differ from those without beyond just a reallocation among capital preservation options. The data show that plans with stable value options have lower percentage of assets in all other classes, not just money market funds. For example, as shown in **Exhibits 17A** and **17B**, as of 2010, plans *without* stable value funds held 52.0 percent of assets in equity funds compared to 45.5 percent for plans *with* stable value funds. Similarly, **Exhibit 17C** shows that, as of 2016, plans *without* stable value funds held 50.1 percent of assets in equity funds compared to 47.7 percent for plans *with* stable value funds. A similar pattern holds for other years and other asset classes (*see* **Exhibit 17A**). These data imply that had a stable value product been offered, the stable value product would have attracted participant money that was otherwise invested in options other than the Credit Union Option. To the extent those options had higher returns, this would have harmed participants.

118. For example, the two equity funds with the greatest assets prior to the Plan Merger, the American Beacon S&P 500 Index Fund and the American Beacon Large Cap Value Fund, outperformed stable value funds over the 2010 to 2015 period.[133] During this

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[132] *See*, *e.g.*, Rubinstein, Mark. "Markowitz's 'Portfolio Selection': A Fifty-Year Retrospective," *The Journal of Finance*, 2002 Jun 1:57(3), pp. 1042-1043 ("it is not a security's own risk that is important to an investor, but rather the contribution the security makes to the variance of his entire portfolio… So the decision to hold a security should not be made simply by comparing its expected return and variance to others, but rather the decision to hold any security would depend on what other securities the investor wants to hold.").

[133] *See* **Exhibit 1a.**

period the Plan did not offer a stable value fund option; had it offered one, the EBRI survey indicate that some assets in equity funds would have likely been directed to the stable value option. From the beginning of 2010 through the end of October 2015, the S&P 500 Index Fund and Large Cap Value Fund had cumulative returns of 108.9 percent and 96.6 percent, respectively, while over the same period, the MIP II's cumulative return was only 9.6 percent.[134] Furthermore, the stable value returns that Mr. King uses in his damages calculations had a cumulative return of 15.8 percent from 2010 to 2015.[135] Therefore, had a stable value product been available in the Plan, some of the assets invested in these equity funds would have likely been invested in the stable value option resulting in losses for plan participants.

119. The above is not merely speculative. The Longstaff Class Cert Report identified some individual participants that transferred assets to the MIP II stable value option from options other than the Credit Union option when the former was added to the Plan investment lineup in October 2015.[136]

120. These analyses show that, had the Plan offered a different investment lineup, some participants may have actually earned lower returns than they actually did.

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[134] Lipper for Investment Management; Morningstar Direct.

[135] King Report, Exhibit 1. As Mr. King does not provide monthly returns, this calculation includes November and December 2015.

[136] Longstaff Class Cert Report, ¶ 72 ("For example: Participant AA_SSN_000051818 transferred $61,048 from the Target Date 2040 Fund into the MIP II in Q1 2016. Participant AA_SSN_000036414 transferred $31,006 from the US Small/Mid Cap Stock Fund into the MIP II in Q2 2016. Participant AA_SSN_000009961 transferred $32,687 from the International Stock Fund into the MIP II in Q3 2016. Participant AA_SSN_000020908 transferred $9,774 from the Inflation Protection Fund into the MIP II in Q4 2016. Participant AA_SSN_000090202 transferred $96,319 from the US Bond Index Fund into the MIP II in Q1 2017.").

C. Mr. King Provides No Reliable Basis for His Assumption that the Plan Would Have Selected a Stable Value Fund that Achieved the Returns of His Purported Benchmark Had the Plan Not Offered the Credit Union Option

121. Mr. King appears to calculate damages by comparing the returns of the Credit Union Option to the average return of individually-managed stable value funds as reported in annual surveys conducted by the SVIA.[137] However, Mr. King fails to account for the fact that the SVIA returns represent a non-investable index of a non-representative sample of stable value funds and the data are "intended to be illustrative in nature."[138]

122. The SVIA surveys provide a summary of stable value fund assets, including the type of assets invested in stable value, the average duration, the portfolio contract mix, and the net crediting rate. Each of these statistics are also reported separately for three types of stable value funds: individually-managed single-plan accounts, bank and investment company commingled pooled funds, and life insurance company accounts attached to full service products. To calculate his damages, Mr. King compares the return for the Credit Union Option to the average asset-weighted net crediting rate that the SVIA reports for individually-managed single-plan accounts. In Exhibit 2 of his report, he presents his claimed losses for each quarter from Q1 2010 through Q4 2017.

123. As an initial matter, the SVIA advises that the data in the surveys may not be representative of stable value funds as a whole and are not intended to be used for the sort of comparison made by Mr. King. In fact, the reports for most years include the following warning:

> The observations and data contained in this report or survey **are intended to be illustrative in nature** to give an overview of the stable value industry, as well as to provide relative trend information. These observations and data are reflective of the

[137] King Report, ¶¶ 13-15 and Exhibit 2.

[138] *See*, *e.g.*, Stable Value Investment Association Investment and Policy Survey, 2015 Annual Survey Covering 1/1/2015 to 12/31/2015, ORTIZ-KING-0000080-97 at 081.

reporting or survey period only and, as such, are subject to change. This information may not be reflective or applicable to a specific plan's stable value investment option or a specific stable value fund. Further, **these observations and data are not intended to constitute nor represent a benchmark**."[139] (emphasis added)

124. Furthermore, the SVIA surveys indicate that "changes may represent a change in participation rather than a change in investment or a policy trend."[140] For example, UTC, Eastman Chemical Company, and DB Advisors all participated in some survey years, but not other years.[141] This appears to indicate that participation in the survey is voluntary. This may cause bias in the index returns, particularly if funds with relatively low returns (which may tend to close over time) may be less likely to participate in the survey and disclose their returns. Therefore, the average return of SVIA's sample may overstate the returns experienced by all stable value funds.

125. For these reasons, even if one were to accept that a stable value fund is an appropriate benchmark (which it is not), the SVIA average is an inappropriate benchmark for evaluating the performance of the Credit Union Option.

126. Furthermore, as discussed above, while the Plan fiduciaries considered adding an individually-managed stable value option at least twice in the past, it was recommended that a pooled vehicle was more appropriate for the Plan. Even according to Mr. King's

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[139] Stable Value Investment Association Annual Investment and Policy Surveys, 2010-2012, 2015-2016, 2018-2019, ORTIZ-KING-0000001-050, 052-065, 080-111, 127-140, 142-166.

[140] Stable Value Investment Association Annual Investment and Policy Surveys, 2010-2016, 2018-2019, ORTIZ-KING-0000001-050, 052-111, 127-140, 142-166. I do not have access to the 2017 survey.

[141] Stable Value Investment Association Annual Investment and Policy Surveys, 2010-2016, 2018-2019, ORTIZ-KING-0000001-050, 052-111, 127-140, 142-166.

SVIA data, the average returns on pooled stable value funds are generally lower than those on individually-managed accounts.[142]

127. Moreover, Plaintiffs have not alleged why the stable value options actually added to the Plan are not reasonable, nor has Mr. King explained so. In fact, the MIP II is widely held by other large retirement plans. For example, in 2017, at least fifty 401(k) plans with over $1 billion in assets offered the MIP II in their plan lineup.[143] Even assuming that Mr. King is correct that the Plan would have "mapped" the Credit Union Option investments directly into a stable value option, with no other changes, the Plan may have simply added the MIP II earlier (and still moved those investments to the AA Stable Value Fund in June 2017). Re-calculating damages using that alternative plan lineup reduces his damages substantially from $184 million to $103 million (*see* **Exhibits 18A** and **18B**).

D. Contrary to Mr. King's Assertions, it is not Realistic for Capital Preservation Vehicles to Consistently Provide Higher Returns than the Inflation Rate

128. While Mr. King opines that "[i]t is especially important for a principal preservation investment to outpace inflation," consistently exceeding inflation is not a realistic goal for capital preservation options.[144] In fact, even stable value funds do not consistently outperform inflation.

129. As discussed above, Mr. King's damages calculation relies on a time series of average stable value returns for individually-managed accounts for 2010 through 2017, as

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[142] *See* King Report, Exhibit 1, showing that the average rate on individually-managed accounts over 2010 to 2017 was 2.40 percent, compared to 2.02 percent for pooled funds.

[143] Managed Income Portfolio II Commingled Pool Form 5500 DFE Filing, Schedule D, October 1, 2017; Department of Labor Form 5500 Datasets. I categorized a plan as 401(k) plan if the Line 8a of its Form 5500 Filing contains code "2J."

[144] King Report, ¶ 9.

reported in surveys conducted by the SVIA. Yet even these stable value returns do not outpace inflation in all years. In **Exhibit 19**, I show Mr. King's stable value returns and those of the MIP II (the stable value option offered by the Plan for part of the Review Period) relative to the inflation rate for the 2010 to 2017 period. As the exhibit shows, Mr. King's stable value returns were lower than inflation in 2011, were only 3 basis points higher than inflation in 2016, and only 13 basis points higher than inflation in 2017. Additionally, the MIP II returns did not exceed inflation in five of the eight years between 2010 and 2017. In 2011, for example, the MIP II had a return of 1.72 percent compared to an inflation rate of 2.96 percent, a difference of 124 basis points.[145]

130. This analysis corroborates that it is not a realistic goal for capital preservation options to consistently outpace inflation.

Walter N. Torous

Walter Torous, Ph. D.
July 13, 2020

[145] Morningstar Direct; U.S. Bureau of Labor Statistics, "Consumer Price Index for All Urban Consumers: All Items in U.S. City Average," retrieved from FRED, Federal Reserve Bank of St. Louis.

Exhibit 1A

Exhibit 1A

American Airlines $uper $aver 401(k) Plan
Invested Assets by Investment Option
Old Plan Lineup
Year-End 2010 - 2014

		2010		2011		2012		2013		2014	
Investment Option	**Share Class**	**Assets ($ millions)**	**% of Plan Assets**	**Assets ($ millions)**	**% of Plan Assets**	**Assets ($ millions)**	**% of Plan Assets**	**Assets ($ millions)**	**% of Plan Assets**	**Assets ($ millions)**	**% of Plan Assets**
Capital Preservation Options											
Credit Union Option	N/A	1,255	18.3%	1,695	27.4%	1,260	19.0%	1,145	14.0%	1,060	12.0%
Sub Total – Capital Preservation Options		**1,255**	**18.3%**	**1,695**	**27.4%**	**1,260**	**19.0%**	**1,145**	**14.0%**	**1,060**	**12.0%**
Other Fixed Income Options											
American Beacon Short-Term Bond Fund	Inst	101	1.5%	85	1.4%	139	2.1%	99	1.2%	292	3.3%
American Beacon Intermediate Bond Fund	Inst	205	3.0%	474	7.7%	305	4.6%	265	3.2%	317	3.6%
American Beacon High Yield Bond Fund	AMR	31	0.5%	24	0.4%	32	0.5%	34	0.4%	33	0.4%
American Beacon Treasury Inflation Protected Securities	Instl	76	1.1%	133	2.1%	113	1.7%	61	0.7%	55	0.6%
Fidelity U.S. Bond Index Fund[5]	Inst[10]	202	2.9%	-	-	-	-	-	-	-	-
Fidelity U.S. Bond Index Fund[5]	Advantage[10]	-	-	261	4.2%	297	4.5%	294	3.6%	386	4.4%
T. Rowe Price High Yield Fund	Investor	63	0.9%	36	0.6%	114	1.7%	59	0.7%	60	0.7%
Sub Total – Other Fixed Income Options		**678**	**9.9%**	**1,013**	**16.4%**	**1,000**	**15.1%**	**812**	**9.9%**	**1,143**	**12.9%**
Equity Options											
American Beacon Emerging Markets Fund	AMR	81	1.2%	43	0.7%	47	0.7%	49	0.6%	48	0.5%
American Beacon International Equity Fund	AMR	256	3.7%	191	3.1%	232	3.5%	280	3.4%	244	2.8%
American Beacon International Equity Index Fund	Inst	256	3.7%	215	3.5%	375	5.6%	494	6.0%	410	4.6%
American Beacon Large Cap Growth Fund[2]	AMR	52	0.8%	46	0.7%	-	-	-	-	-	-
American Beacon Large Cap Value Fund	AMR	532	7.8%	477	7.7%	498	7.5%	640	7.8%	733	8.3%
American Beacon Mid-Cap Value Fund	AMR	28	0.4%	22	0.4%	33	0.5%	57	0.7%	58	0.7%
American Beacon S&P 500 Index Fund	Inst	378	5.5%	402	6.5%	594	8.9%	902	11.0%	1,230	13.9%
American Beacon Small Cap Index Fund	Inst	91	1.3%	39	0.6%	182	2.7%	281	3.4%	142	1.6%
American Beacon Small Cap Value Fund	AMR	391	5.7%	309	5.0%	273	4.1%	495	6.0%	330	3.7%
Dodge & Cox Stock Fund	Rtl	267	3.9%	214	3.5%	294	4.4%	425	5.2%	736	8.3%
Dreyfus Emerging Markets Fund	I	109	1.6%	53	0.9%	75	1.1%	48	0.6%	53	0.6%
Dreyfus Midcap Value Fund[3]	A[8]	528	7.7%	170	2.7%	322	4.8%	-	-	-	-
Dreyfus Midcap Value Fund[3]	I[8]	-	-	-	-	-	-	515	6.3%	293	3.3%
Fidelity Diversified International Fund	Rtl	154	2.2%	107	1.7%	109	1.6%	126	1.5%	118	1.3%
Fidelity Puritan Fund	Rtl	41	0.6%	37	0.6%	45	0.7%	51	0.6%	110	1.2%
Janus Fund	I	88	1.3%	66	1.1%	71	1.1%	82	1.0%	373	4.2%
MFS Growth Fund[4]	R4	-	-	-	-	50	0.8%	193	2.4%	96	1.1%

Exhibit 1A

American Airlines $uper $aver 401(k) Plan
Invested Assets by Investment Option
Old Plan Lineup
Year-End 2010 - 2014

		2010		2011		2012		2013		2014	
Investment Option	**Share Class**	**Assets ($ millions)**	**% of Plan Assets**	**Assets ($ millions)**	**% of Plan Assets**	**Assets ($ millions)**	**% of Plan Assets**	**Assets ($ millions)**	**% of Plan Assets**	**Assets ($ millions)**	**% of Plan Assets**
Perkins Small Cap Value Fund	L[9]	166	2.4%	-	-	-	-	-	-	-	-
Perkins Small Cap Value Fund	I[9]	-	-	128	2.1%	122	1.8%	140	1.7%	146	1.6%
T. Rowe Price Mid-Cap Growth Fund	Investor	444	6.5%	204	3.3%	180	2.7%	226	2.8%	258	2.9%
T. Rowe Price New Horizons Fund	Investor	318	4.6%	123	2.0%	108	1.6%	163	2.0%	130	1.5%
T. Rowe Price Science & Technology Fund	Investor	155	2.3%	50	0.8%	39	0.6%	62	0.8%	76	0.9%
Sub Total – Equity Options		**4,335**	**63.3%**	**2,896**	**46.8%**	**3,649**	**54.9%**	**5,229**	**63.7%**	**5,584**	**63.0%**
Balanced Options											
American Beacon Balanced Fund	AMR	234	3.4%	239	3.9%	250	3.8%	301	3.7%	327	3.7%
Sub Total – Balanced Options		**234**	**3.4%**	**239**	**3.9%**	**250**	**3.8%**	**301**	**3.7%**	**327**	**3.7%**
Other Investment Options											
Company Stock[6]	N/A	3	0.0%	-	-	-	-	-	-	-	-
Pre-Mixed Portfolios	N/A	337	4.9%	288	4.7%	392	5.9%	579	7.1%	572	6.5%
Self-directed Brokerage Account[7]	N/A	8	0.1%	61	1.0%	92	1.4%	137	1.7%	176	2.0%
Sub Total – Other Investment Options		**348**	**5.1%**	**349**	**5.6%**	**484**	**7.3%**	**716**	**8.7%**	**748**	**8.4%**
Total Invested Assets		**$6,850**		**$6,192**		**$6,643**		**$8,203**		**$8,862**	
Number of Options		**30**		**29**		**29**		**29**		**29**	

Notes:
[1] Data are as of year-end.
[2] The American Beacon Large Cap Growth Fund was liquidated in Q1 2012
[3] The Dreyfus MidCap Value Fund was listed under a different name, Dreyfus Opportunistic Midcap Value Fund, starting in 2011 Q1
[4] The MFS Growth Fund was added to the plan in Q2 2012.
[5] The Fidelity U.S. Bond Index Fund was listed under a different name, Spartan U.S. Bond Index Fund, starting in 2011 Q1
[6] The Company Stock was frozen by the Plan's independent Fiduciary in November 2011 and participant balances were transferred to the Qualified Default Investment Alternative in December 2011.
[7] The Self-directed Brokerage Account was added to the plan in Q4 2010
[8] The share class for Dreyfus Midcap Value Fund changed from A to I effective April 26, 2013 (Q2 2013)
[9] The share class for Perkins Small Cap Value Fund changed from L to I on July 30, 2010 (Q3 2010), but the Q3 2010 and Q4 2010 quarterly reports did not reflect this change. The new share class was reflected beginning in the Q1 2011 report.
[10] Assets for Fidelity U.S. Bond Index Fund were transferred to the newly created Advantage share class effective May 30, 2011 (Q2 2011).

Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 Q1 – 2014 Q4; SEC Summary Prospectuses.

Exhibit 1B

Exhibit 1B

American Airlines $uper $aver 401(k) Plan
Invested Assets by Investment Option
New Plan Lineup
Year-End 2015 - 2017

	2015		2016		2017	
Investment Option	**Assets ($ millions)**	**% of Plan Assets**	**Assets ($ millions)**	**% of Plan Assets**	**Assets ($ millions)**	**% of Plan Assets**
Capital Preservation Options						
Credit Union Option	769	11.3%	802	9.2%	685	6.5%
Fidelity Institutional Money Market Fund	56	0.8%	-	-	-	-
MIP II Class 3	72	1.1%	184	2.1%	-	-
AA Stable Value Fund	-	-	-	-	175	1.6%
Sub Total – Capital Preservation Options	**898**	**13.2%**	**986**	**11.3%**	**859**	**8.1%**
Other Fixed Income Options						
Diversified Bond Fund	59	0.9%	86	1.0%	121	1.1%
Inflation Protection Fund	41	0.6%	63	0.7%	67	0.6%
US Bond Index	460	6.8%	498	5.7%	550	5.2%
Sub Total – Other Fixed Income Options	**561**	**8.3%**	**646**	**7.4%**	**738**	**7.0%**
Equity Options						
Emerging Markets Stock Index Fund	93	1.4%	155	1.8%	299	2.8%
International Developed Markets Stock	344	5.1%	470	5.4%	671	6.3%
International Stock Fund	67	1.0%	69	0.8%	98	0.9%
US Large Cap Growth Stock Fund	233	3.4%	155	1.8%	319	3.0%
US Large Cap Value Stock Fund	125	1.8%	207	2.4%	224	2.1%
US Large Cap Stock Index	784	11.6%	957	11.0%	1,259	11.9%
US Small/Mid Cap Stock Fund	121	1.8%	159	1.8%	177	1.7%
US Small/Mid Cap Stock Index	383	5.6%	522	6.0%	616	5.8%
Sub Total – Equity Options	**2,149**	**31.7%**	**2,693**	**30.9%**	**3,662**	**34.6%**

Exhibit 1B

American Airlines $uper $aver 401(k) Plan
Invested Assets by Investment Option
New Plan Lineup

Year-End 2015 - 2017

Investment Option	2015 Assets ($ millions)	2015 % of Plan Assets	2016 Assets ($ millions)	2016 % of Plan Assets	2017 Assets ($ millions)	2017 % of Plan Assets
Balanced Options						
Target Date Post Retirement	199	2.9%	223	2.6%	226	2.1%
Target Date 2015	210	3.1%	281	3.2%	293	2.8%
Target Date 2020	545	8.0%	775	8.9%	873	8.3%
Target Date 2025	765	11.3%	1,107	12.7%	1,342	12.7%
Target Date 2030	671	9.9%	894	10.3%	1,123	10.6%
Target Date 2035	299	4.4%	372	4.3%	480	4.5%
Target Date 2040	127	1.9%	166	1.9%	223	2.1%
Target Date 2045	55	0.8%	80	0.9%	116	1.1%
Target Date 2050	29	0.4%	53	0.6%	80	0.8%
Target Date 2055	12	0.2%	26	0.3%	50	0.5%
Target Date 2060	10	0.2%	18	0.2%	25	0.2%
Sub Total – Balanced Options	**2,921**	**43.1%**	**3,994**	**45.9%**	**4,832**	**45.7%**
Other Investment Options						
Company Stock	1	0.0%	2	0.0%	2	0.0%
Self-directed Brokerage Account	251	3.7%	387	4.4%	485	4.6%
Sub Total – Other Investment Options	**252**	**3.7%**	**389**	**4.5%**	**486**	**4.6%**
Total Invested Assets	**$6,781**		**$8,709**		**$10,577**	
Number of Options	**27**		**26**		**26**	

Note:

[1] Data are as of year-end.

Source:

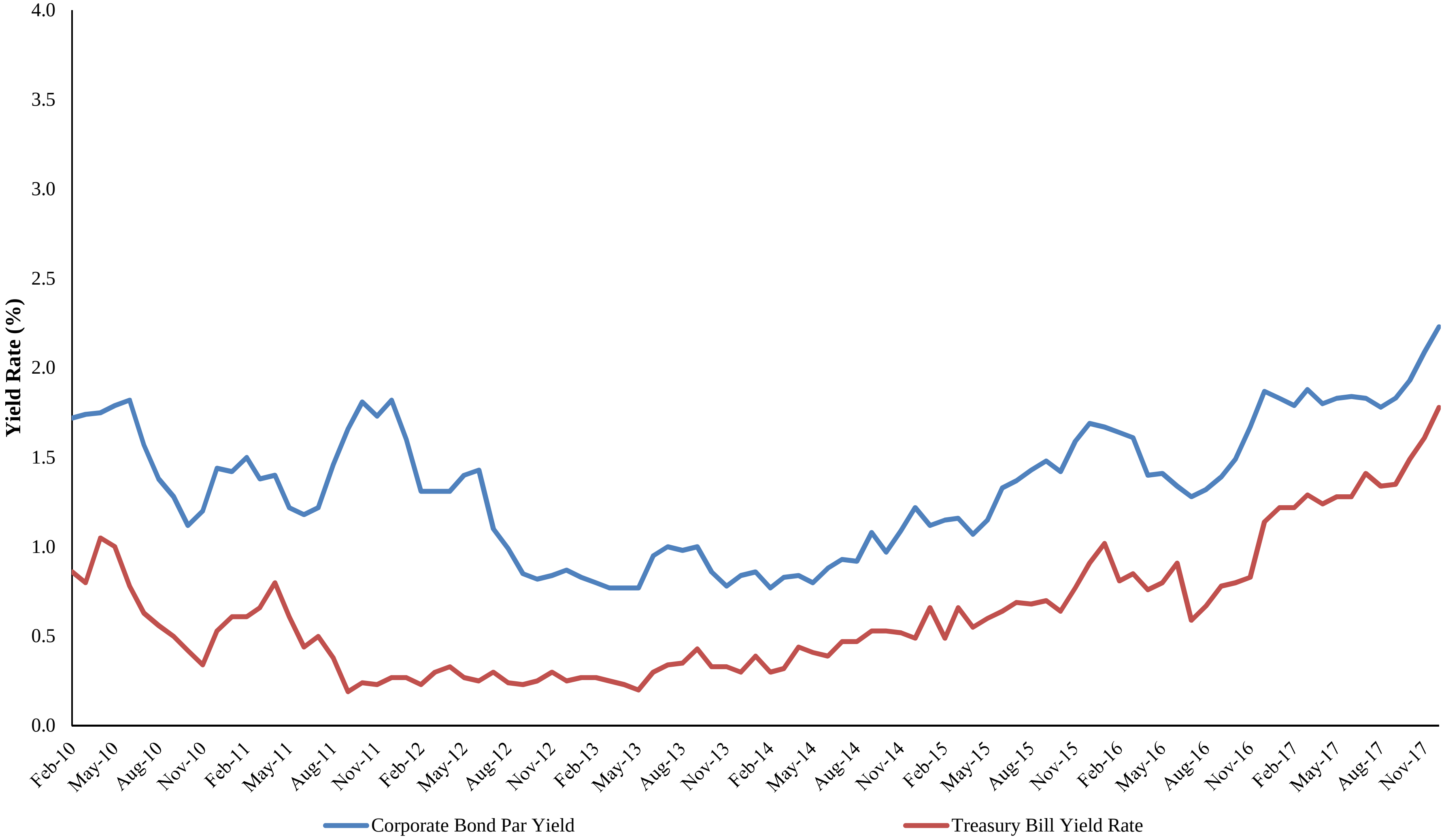
American Airlines Plan Participant Data.

Exhibit 2A

Exhibit 2A

2-Year Treasury Bill Yield Curve Rate v. 2-Year High Quality Market Corporate Bond Par Yield

February 1, 2010 - December 1, 2017



Note:

[1] According to the Federal Reserve Economic Data website, High Quality Market Corporate Bonds include "data from a set of high quality corporate bonds rated AAA, AA, or A that accurately represent the high quality corporate bond market."

Sources:

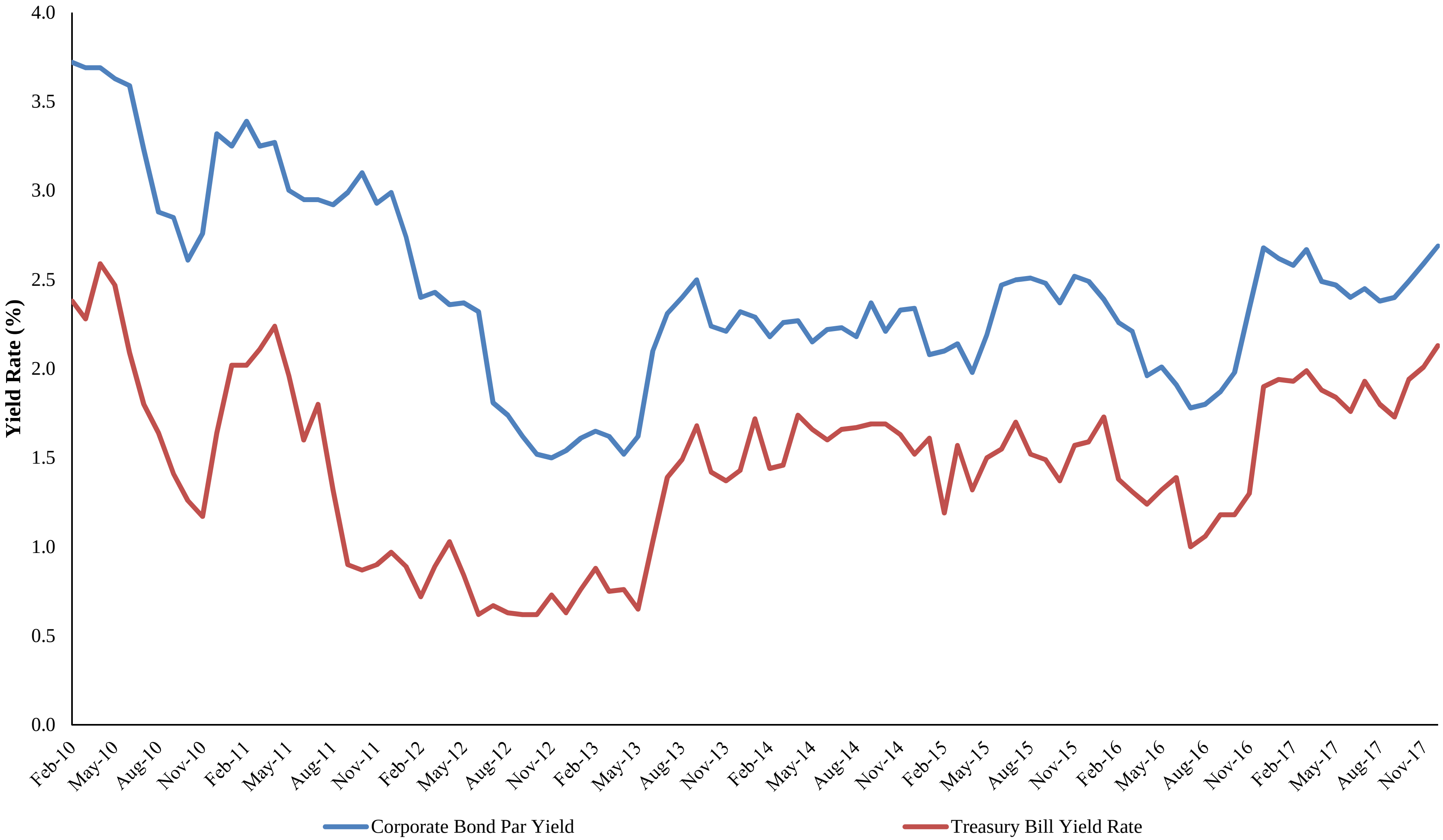
U.S. Department of the Treasury, 2-Year High Quality Market (HQM) Corporate Bond Par Yield, retrieved from FRED, Federal Reserve Bank of St. Louis; U.S. Department of the Treasury, 2-Year Daily Treasury Yield Curve, available at <https://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yieldAll>.

Exhibit 2B

Exhibit 2B

5-Year Treasury Bill Yield Curve Rate v. 5-Year High Quality Market Corporate Bond Par Yield

February 1, 2010 - December 1, 2017



Note:

[1] According to the Federal Reserve Economic Data website, High Quality Market Corporate Bonds include "data from a set of high quality corporate bonds rated AAA, AA, or A that accurately represent the high quality corporate bond market."

Sources:

U.S. Department of the Treasury, 5-Year High Quality Market (HQM) Corporate Bond Par Yield, retrieved from FRED, Federal Reserve Bank of St. Louis; U.S. Department of the Treasury, 5-Year Daily Treasury Yield Curve, available at <https://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yieldAll>.

Exhibit 3

Exhibit 3

Summary of Assets in Credit Union Option
Assets under $250,000 Insurance Limit

Year-End 2010 - 2017

Year	Assets in Credit Union Option	Assets Under $250,000 Limit	Percentage of Assets Under $250,000 Limit	Participants In Credit Union Option	Participants With All Assets Under Limit	Percentage of Participants With All Assets Under Limit	Average Balance in Credit Union Option
2010	$1,255,308,660	$1,163,638,728	92.7%	36,511	35,863	98.2%	$34,382
2011	$1,695,159,828	$1,536,489,193	90.6%	34,794	33,642	96.7%	$48,720
2012	$1,259,885,678	$1,146,762,657	91.0%	30,538	29,730	97.4%	$41,256
2013	$1,145,443,114	$1,008,215,430	88.0%	26,269	25,463	96.9%	$43,604
2014	$1,059,795,166	$931,627,500	87.9%	23,713	22,937	96.7%	$44,693
2015	$769,083,595	$711,068,762	92.5%	18,369	17,883	97.4%	$41,869
2016	$802,374,073	$738,858,794	92.1%	19,535	19,006	97.3%	$41,074
2017	$684,756,349	$625,844,168	91.4%	16,885	16,398	97.1%	$40,554

Sources:
American Airlines Plan Participant Data; “Rate Disclosures – Checking,” American Airlines Credit Union, <https://www.aacreditunion.org/wdg_disclosures.aspx>; Internet Archive Wayback Machine <https://web.archive.org/>.

Exhibit 4A

Exhibit 4A

Assets (in $ Millions) Invested in Capital Preservation

December 31, 2015 - February 28, 2018

Fund	12/31/2015	3/31/2016	6/30/2016	9/30/2016	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	2/28/2018
Credit Union Option	$769	$767	$763	$767	$802	$736	$713	$767	$685	$666
Fidelity Institutional Money Market Fund[1]	$56	$56	$56	-	-	-	-	-	-	-
Stable Value Options[2]	$72	$94	$88	$91	$184	$192	$188	$186	$175	$191
Capital Preservation Total	$898	$916	$907	$858	$986	$927	$901	$953	$859	$857
Plan Total	$6,781	$6,861	$7,017	$7,359	$8,709	$9,259	$9,655	$10,107	$10,577	$10,694
Percentage of Plan Assets in:										
Credit Union Option	11.3%	11.2%	10.9%	10.4%	9.2%	7.9%	7.4%	7.6%	6.5%	6.2%
Money Market Fund	0.8%	0.8%	0.8%	-	-	-	-	-	-	-
Stable Value Options	1.1%	1.4%	1.3%	1.2%	2.1%	2.1%	1.9%	1.8%	1.6%	1.8%
Percentage of Assets in Capital Preservation	13.2%	13.4%	12.9%	11.7%	11.3%	10.0%	9.3%	9.4%	8.1%	8.0%
Percentage of Assets in Capital Preservation in:										
Credit Union Option	85.7%	83.7%	84.1%	89.4%	81.3%	79.3%	79.1%	80.5%	79.7%	77.7%
Money Market Fund	6.3%	6.1%	6.2%	-	-	-	-	-	-	-
Stable Value Options	8.1%	10.2%	9.7%	10.6%	18.7%	20.7%	20.9%	19.5%	20.3%	22.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes:

[1] The Fidelity Institutional Money Market Fund was removed from the Plan after Q2 2016.

[2] The stable value option in the Plan changed from the MIP II to the American Airlines Stable Value Fund (which invested in the Wells Fargo Stable Value Fund W, a stable value commingled pool managed by Galliard) on June 30, 2017.

Source:

American Airlines Plan Participant Data.

Exhibit 4B

Exhibit 4B

Participants Invested in Capital Preservation

December 31, 2015 - February 28, 2018

Fund	12/31/2015	3/31/2016	6/30/2016	9/30/2016	12/31/2016	3/31/2017	6/30/2017	9/30/2017	12/31/2017	2/28/2018
Credit Union Option	18,369	20,268	18,842	18,457	19,535	17,853	17,387	17,998	16,885	16,642
Fidelity Institutional Money Market Fund[1]	2,759	2,811	2,780	-	-	-	-	-	-	-
Stable Value Options[2]	3,086	3,978	3,643	3,618	5,867	5,869	5,890	5,808	5,740	6,355
Capital Preservation Total	22,498	24,954	23,206	21,207	23,947	22,637	22,268	22,845	21,715	22,031
Plan Total	86,132	85,073	85,668	85,934	102,879	103,424	104,019	104,547	104,632	104,649
Percentage of Plan Participants in:										
Credit Union Option	21.3%	23.8%	22.0%	21.5%	19.0%	17.3%	16.7%	17.2%	16.1%	15.9%
Money Market Fund	3.2%	3.3%	3.2%	-	-	-	-	-	-	-
Stable Value Options	3.6%	4.7%	4.3%	4.2%	5.7%	5.7%	5.7%	5.6%	5.5%	6.1%
Percentage of Participants in Capital Preservation	26.1%	29.3%	27.1%	24.7%	23.3%	21.9%	21.4%	21.9%	20.8%	21.1%
Percentage of Participants in Capital Preservation in:										
Credit Union Option	81.6%	81.2%	81.2%	87.0%	81.6%	78.9%	78.1%	78.8%	77.8%	75.5%
Money Market Fund	12.3%	11.3%	12.0%	-	-	-	-	-	-	-
Stable Value Options	13.7%	15.9%	15.7%	17.1%	24.5%	25.9%	26.5%	25.4%	26.4%	28.8%

Notes:

[1] The Fidelity Institutional Money Market Fund was removed from the Plan after Q2 2016.

[2] The stable value option in the Plan changed from the MIP II to the American Airlines Stable Value Fund (which invested in the Wells Fargo Stable Value Fund W, a stable value commingled pool managed by Galliard) on June 30, 2017.

Source:

American Airlines Plan Participant Data.

Exhibit 5

Exhibit 5

Percentage of 401(k) Plans Offering Stable Value and Money Market Funds

2010 - 2019

Survey	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Deloitte Annual Defined Contribution Benchmarking Survey[1]										
Stable Value	85%	73%		77%		76%		76%		78%
Money Market	62%	53%		57%		59%		59%		63%
MetLife Stable Value Study										
Stable Value						82%		83%		
Money Market						62%		52%		
Both Stable Value and Money Market						45%		36%		
Stable Value Only						38%		46%		
Money Market Only						18%		16%		
Vanguard: How America Saves (All Plans)[1]										
Stable Value		58%	58%	58%	57%	57%	63%	63%	64%	65%
Money Market		70%	70%	71%	71%	72%	67%	64%	64%	63%
Vanguard: How America Saves (Plans with 5,000 + Participants)[1]										
Stable Value		61%	61%	60%	57%	58%	73%	75%	75%	75%
Money Market		66%	69%	73%	73%	77%	65%	63%	65%	64%

Note:

[1] GICs are included in the totals for Stable Value.

Sources:

Deloitte, "Annual 401(k) Survey Retirement Readiness: 2010 Edition," 2010, p. 49, Exhibit 7.28; Deloitte, "Annual 401(k) Benchmarking Survey: 2011 Edition," 2011, p. 54, Exhibit 7.26; Deloitte, "Annual Defined Contribution Benchmarking Survey: 2013–2014 Edition," 2014, p. 24, Exhibit 5.1; Deloitte, "Annual Defined Contribution Benchmarking Survey: 2015 Edition," 2015, p. 32, Exhibit 5.1; Deloitte, "Defined Contribution Benchmarking Survey: 2017 Edition," 2017, p. 20, Exhibit 6.3; Deloitte, "Defined Contribution Benchmarking Survey Report: 2019 Edition," 2019, p. 17, Exhibit 6.1; Vanguard, "How America Saves 2012: A report on Vanguard 2011 defined contribution plan data," June 2012, p. 51; Vanguard, "How America Saves 2013: A report on Vanguard 2012 defined contribution plan data," June 2013, p. 49; Vanguard, "How America Saves 2014: A report on Vanguard 2013 defined contribution plan data," June 2014, p. 49; Vanguard, "How America Saves 2015: A report on Vanguard 2014 defined contribution plan data," June 2015, p. 55; Vanguard, "How America Saves 2016: Vanguard 2015 defined contribution plan data," June 2016, p. 61; Vanguard, "How America Saves 2017: Vanguard 2016 defined contribution plan data," June 2017, p. 55; Vanguard, "How America Saves 2018: A report on Vanguard 2017 defined contribution plan data," June 2018, p. 61; Vanguard, "How America Saves 2019: A report on Vanguard 2018 defined contribution plan data," June 2019, p. 62; Vanguard, "How America Saves 2020: A report on Vanguard 2019 defined contribution plan data," June 2020, p. 61; MetLife, "2015 Stable Value Study: A Survey of Plan Sponsors, Stable Value Fund Providers and Advisors," 2015, p. 5; MetLife, "2017 Stable Value Study: A Survey of Plan Sponsors, Stable Value Fund Providers and Advisors," 2017, p. 2.

Exhibit 6

Exhibit 6

Money Market Options in Defined Contribution Plans of the Top 10 Managers of U.S. Defined Contribution Assets as of 2018

#	Asset Manager	AUM[1]	Plan Name	Offered Money Market
1	Vanguard Group	$1,176	The Vanguard Retirement and Savings Plan	Yes
2	BlackRock	$830	BlackRock Retirement Savings Plan	*
3	Fidelity Investments	$666	Fidelity Retirement Savings Plan	Yes
4	Nuveen	$508	TIAA Retirement Plan	Yes
5	T. Rowe Price	$413	T. Rowe Price U.S. Retirement Program	Yes
6	Capital Group	$366	Capital Retirement Savings Plan	Yes
7	State Street Global	$297	State Street Salary Savings Plan	Yes
8	Prudential Financial	$222	The Prudential Employee Savings Plan	*
9	J.P. Morgan Asset Management	$195	JPMorgan Chase 401(k) Savings Plan	Yes
10	Northern Trust Asset Management	$166	The Northern Trust Company Thrift-Incentive Plan	*
			Total	**7 / 10**

Notes:

[1] Assets Under Management ("AUM") represents the total U.S.-client institutional defined contribution assets managed by the asset manager as reported to Pensions & Investments as of December 31, 2018. Dollar values are in billions.

[2] The three plans designated with a * did not include money market options but included short-term investment grade funds.

Sources:

Pensions & Investments, “The Largest Money Managers,” May 27, 2019, p. 27; 2018 Form 5500s.

Exhibit 7

Exhibit 7

Credit Union Option and Money Market Mutual Funds[1]

Three-Year & Five-Year Returns

Q1 2010

Peer Group	Credit Union Option: Return	Credit Union Option: Percentile Rank	Credit Union Option: Number of Peers	Money Market Funds: 25th Percentile	Money Market Funds: Median	Money Market Funds: Mean	Money Market Funds: 75th Percentile
Three-Year Annualized Returns							
All Money Market Funds[2]	2.76%	99th Percentile	488	1.61%	1.92%	1.84%	2.17%
Money Markets Funds with an AUM of $1B or More[3]	2.76%	99th Percentile	234	1.73%	2.04%	2.03%	2.32%
Government/Treasury Money Market Funds Only[4]	2.76%	99th Percentile	225	1.60%	1.83%	1.81%	2.10%
Government/Treasury Money Market Funds Only & with an AUM of $1B or More[5]	2.76%	99th Percentile	112	1.71%	1.93%	1.93%	2.14%
Five-Year Annualized Returns							
All Money Market Funds[2]	3.24%	94th Percentile	475	2.32%	2.72%	2.56%	2.98%
Money Markets Funds with an AUM of $1B or More[3]	3.24%	90th Percentile	232	2.55%	2.83%	2.80%	3.10%
Government/Treasury Money Market Funds Only[4]	3.24%	99th Percentile	221	2.51%	2.72%	2.64%	2.94%
Government/Treasury Money Market Funds Only & with an AUM of $1B or More[5]	3.24%	97th Percentile	110	2.61%	2.79%	2.79%	3.00%

Notes:

[1] Includes mutual funds in the Lipper for Investment Management database with three/five years of returns. For each fund, the highest returning share class over the period is used.

[2] Includes mutual funds with a U.S. Mutual Fund Classification Code of Institutional Money Market Funds, Institutional U.S. Government Money Market Funds, Institutional U.S. Treasury Money Market Funds, Money Market Instrument Funds, U.S. Government Money Market Funds, U.S. Treasury Money Market Fund, Institutional Tax-Exempt Money Market Funds, or Tax-Exempt Money Market Funds.

[3] Includes mutual funds with a U.S. Mutual Fund Classification Code of Institutional Money Market Funds, Institutional U.S. Government Money Market Funds, Institutional U.S. Treasury Money Market Funds, Money Market Instrument Funds, U.S. Government Money Market Funds, U.S. Treasury Money Market Fund, Institutional Tax-Exempt Money Market Funds, or Tax-Exempt Money Market Funds and funds with at least $1 billion Assets Under Management (AUM).

[4] Includes mutual funds with a U.S. Mutual Fund Classification Code of Institutional U.S. Government Money Market Funds, Institutional U.S. Treasury Money Market Funds, U.S. Government Money Market Funds, or U.S. Treasury Money Market Fund.

[5] Includes mutual funds with a U.S. Mutual Fund Classification Code of Institutional U.S. Government Money Market Funds, Institutional U.S. Treasury Money Market Funds, U.S. Government Money Market Funds, or U.S. Treasury Money Market Fund and funds with at least $1 billion Assets Under Management (AUM)

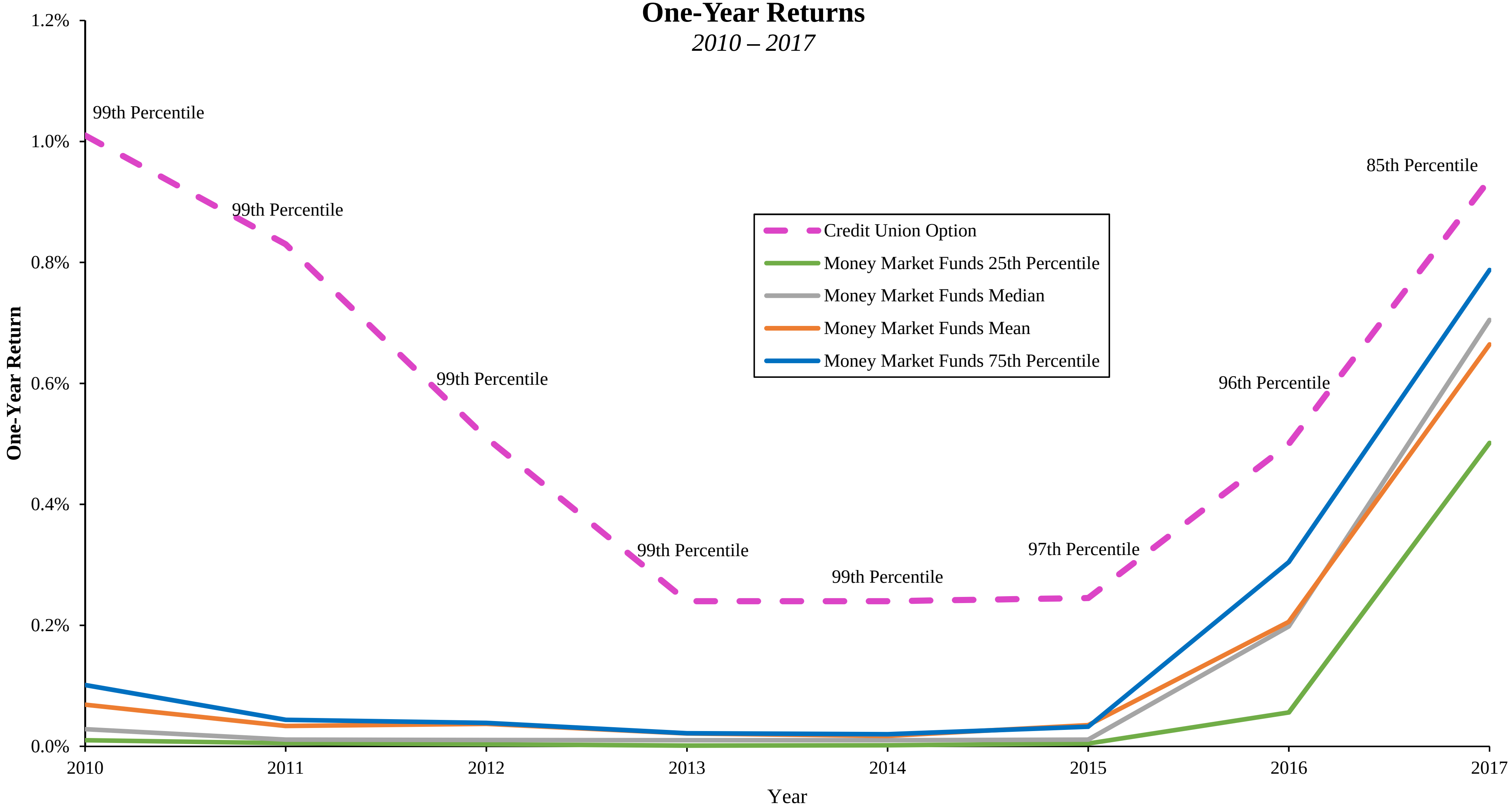
Sources:

American Airlines Employee Benefit Plans Quarterly Reports, Q1 2010; Lipper for Investment Management.

Exhibit 8A

Exhibit 8A

Credit Union Option vs. Money Market Mutual Funds
One-Year Returns
2010 – 2017



Note:
[1] For each year, all mutual funds in the Lipper for Investment Management database with twelve months of returns and a U.S. Mutual Fund Classification Code of Institutional Money Market Funds, Institutional U.S. Government Money Market Funds, Institutional U.S. Treasury Money Market Funds, Money Market Instrument Funds, U.S. Government Money Market Funds, U.S. Treasury Money Market Fund, Institutional Tax-Exempt Money Market Funds, or Tax-Exempt Money Market Funds are included in this analysis. For each money market fund, the highest returning share class each year is used.

Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; Lipper for Investment Management.

Exhibit 8B

Exhibit 8B

Credit Union Option vs. Money Market Mutual Funds
One-Year Returns
2010 – 2017

	Credit Union Option			Money Market Funds			
Year	**Return**	**Percentile Rank**	**Number of Peers**	**25th Percentile**	**Median**	**Mean**	**75th Percentile**
2010	1.01%	99th Percentile	437	0.01%	0.03%	0.07%	0.10%
2011	0.83%	99th Percentile	440	0.01%	0.01%	0.03%	0.04%
2012	0.51%	99th Percentile	405	0.00%	0.01%	0.04%	0.04%
2013	0.24%	99th Percentile	384	0.00%	0.01%	0.02%	0.02%
2014	0.24%	99th Percentile	374	0.00%	0.01%	0.02%	0.02%
2015	0.25%	97th Percentile	349	0.00%	0.01%	0.04%	0.03%
2016	0.50%	96th Percentile	274	0.06%	0.20%	0.21%	0.30%
2017	0.94%	85th Percentile	273	0.50%	0.70%	0.66%	0.79%

Note:
[1] For each year, all mutual funds in the Lipper for Investment Management database with twelve months of returns and a U.S. Mutual Fund Classification Code of Institutional Money Market Funds, Institutional U.S. Government Money Market Funds, Institutional U.S. Treasury Money Market Funds, Money Market Instrument Funds, U.S. Government Money Market Funds, U.S. Treasury Money Market Fund, Institutional Tax-Exempt Money Market Funds, or Tax-Exempt Money Market Funds are included in this analysis. For each money market fund, the highest returning share class each year is used.

Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; Lipper for Investment Management.

Exhibit 8C

Exhibit 8C

Credit Union Option vs. Government & Treasury Money Market Mutual Funds
One-Year Returns
2010 – 2017

	Credit Union Option			Money Market Funds			
Year	**Return**	**Percentile Rank**	**Number of Peers**	**25th Percentile**	**Median**	**Mean**	**75th Percentile**
2010	1.01%	99th Percentile	215	0.01%	0.02%	0.04%	0.05%
2011	0.83%	99th Percentile	217	0.00%	0.01%	0.02%	0.02%
2012	0.51%	99th Percentile	205	0.00%	0.01%	0.02%	0.02%
2013	0.24%	99th Percentile	198	0.00%	0.01%	0.01%	0.01%
2014	0.24%	99th Percentile	196	0.00%	0.01%	0.01%	0.01%
2015	0.25%	95th Percentile	192	0.00%	0.01%	0.03%	0.02%
2016	0.50%	99th Percentile	173	0.02%	0.16%	0.15%	0.25%
2017	0.94%	99th Percentile	166	0.44%	0.70%	0.59%	0.76%

Note:
[1] For each year, all mutual funds in the Lipper for Investment Management database with twelve months of returns and a U.S. Mutual Fund Classification Code of Institutional U.S. Government Money Market Funds, Institutional U.S. Treasury Money Market Funds, U.S. Government Money Market Funds, or U.S. Treasury Money Market Fund are included in this analysis. For each money market fund, the highest returning share class each year is used.

Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; Lipper for Investment Management.

Exhibit 8D

Exhibit 8D

Credit Union Option vs. Money Market Mutual Funds With More Than $1B in Assets
One-Year Returns
2010 – 2017

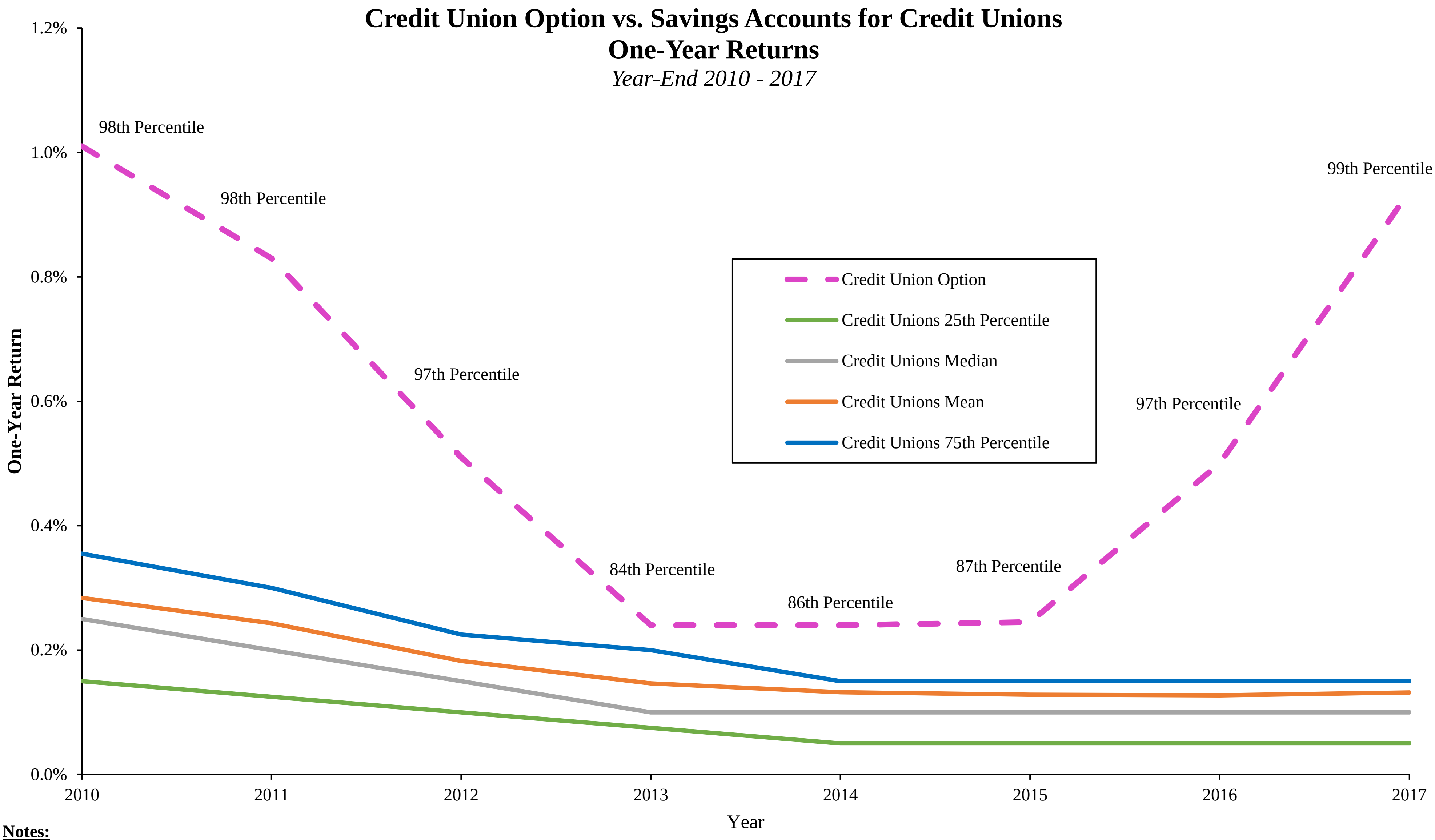
	Credit Union Option			Money Market Funds			
Year	Return	Percentile Rank	Number of Peers	25th Percentile	Median	Mean	75th Percentile
2010	1.01%	99th Percentile	239	0.01%	0.05%	0.08%	0.13%
2011	0.83%	99th Percentile	238	0.01%	0.02%	0.04%	0.06%
2012	0.51%	99th Percentile	229	0.01%	0.01%	0.05%	0.07%
2013	0.24%	99th Percentile	225	0.01%	0.01%	0.03%	0.04%
2014	0.24%	99th Percentile	217	0.01%	0.01%	0.02%	0.02%
2015	0.25%	99th Percentile	210	0.01%	0.01%	0.04%	0.05%
2016	0.50%	95th Percentile	154	0.09%	0.20%	0.21%	0.29%
2017	0.94%	83rd Percentile	164	0.59%	0.73%	0.71%	0.79%

Note:
[1] For each year, all mutual funds in the Lipper for Investment Management database with twelve months of returns and a U.S. Mutual Fund Classification Code of Institutional Money Market Funds, Institutional U.S. Government Money Market Funds, Institutional U.S. Treasury Money Market Funds, Money Market Instrument Funds, U.S. Government Money Market Funds, U.S. Treasury Money Market Fund, Institutional Tax-Exempt Money Market Funds, or Tax-Exempt Money Market Funds and at least $1 billion Assets Under Management (AUM) as of each year-end are included in this analysis. For each money market fund, the highest returning share class each year is used.

Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; Lipper for Investment Management.

Exhibit 9A

Exhibit 9A



Notes:
[1] The annual return for the Credit Union Option is calculated by annualizing the available quarterly (for Q1 2010 through Q2 2015) and monthly (for July 2015 to December 2017) rates. Annual interest rates for each credit union's savings account are calculated by averaging the beginning and ending interest rate each year.
[2] Data prior to year-end 2010 were not available for savings accounts, so the reported value for that year is based on year-end rates rather than average annual rates.
Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; S&P Global Market Intelligence.

Exhibit 9B

Exhibit 9B

Credit Union Option vs. Savings Accounts for Credit Unions
One-Year Returns
Year-End 2010 - 2017

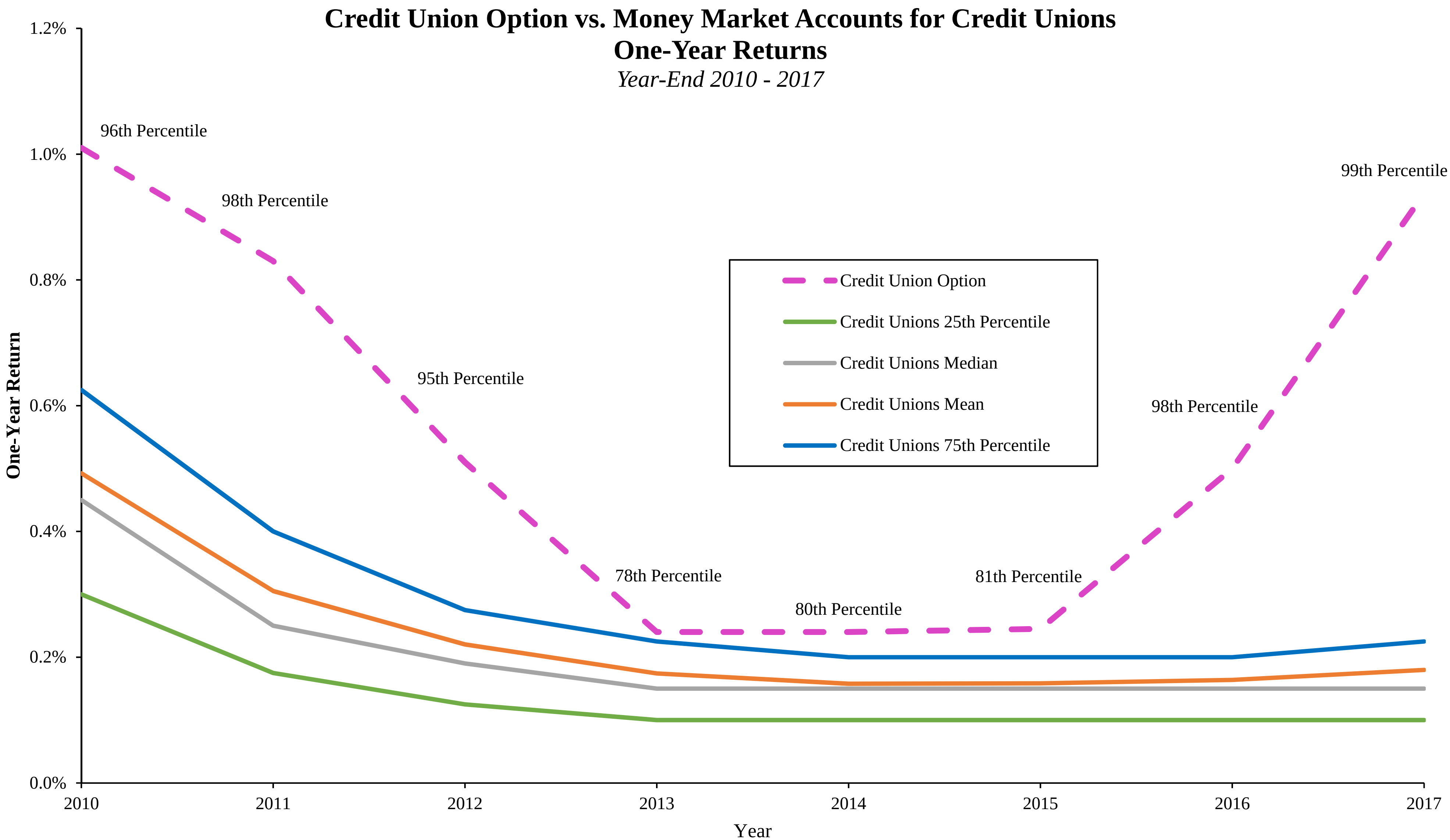
	Credit Union Option			Savings Accounts for Credit Unions			
Year	**Return**	**Percentile Rank**	**Number of Credit Unions**	**25th Percentile**	**Median**	**Mean**	**75th Percentile**
2010	1.01%	98th Percentile	1,469	0.15%	0.25%	0.28%	0.36%
2011	0.83%	98th Percentile	1,444	0.13%	0.20%	0.24%	0.30%
2012	0.51%	97th Percentile	1,515	0.10%	0.15%	0.18%	0.23%
2013	0.24%	84th Percentile	1,702	0.08%	0.10%	0.15%	0.20%
2014	0.24%	86th Percentile	1,692	0.05%	0.10%	0.13%	0.15%
2015	0.25%	87th Percentile	1,752	0.05%	0.10%	0.13%	0.15%
2016	0.50%	97th Percentile	1,779	0.05%	0.10%	0.13%	0.15%
2017	0.94%	99th Percentile	1,830	0.05%	0.10%	0.13%	0.15%

Notes:
[1] The annual return for the Credit Union Option is calculated by annualizing the available quarterly (for Q1 2010 through Q2 2015) and monthly (for July 2015 to December 2017) rates. Annual interest rates for each credit union’s savings account are calculated by averaging the beginning and ending interest rate each year.
[2] Data prior to year-end 2010 were not available for savings accounts, so the reported value for that year is based on year-end rates rather than average annual rates.

Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; S&P Global Market Intelligence.

Exhibit 10A

Exhibit 10A



Note:
[1] The annual return for the Credit Union Option is calculated by annualizing the available quarterly (for Q1 2010 through Q2 2015) and monthly (for July 2015 to December 2017) rates. Annual interest rates for each credit union's money market account are calculated by averaging the beginning and ending interest rate each year.

Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; S&P Global Market Intelligence.

Exhibit 10B

Exhibit 10B

Credit Union Option vs. Money Market Accounts for Credit Unions
One-Year Returns
Year-End 2010 - 2017

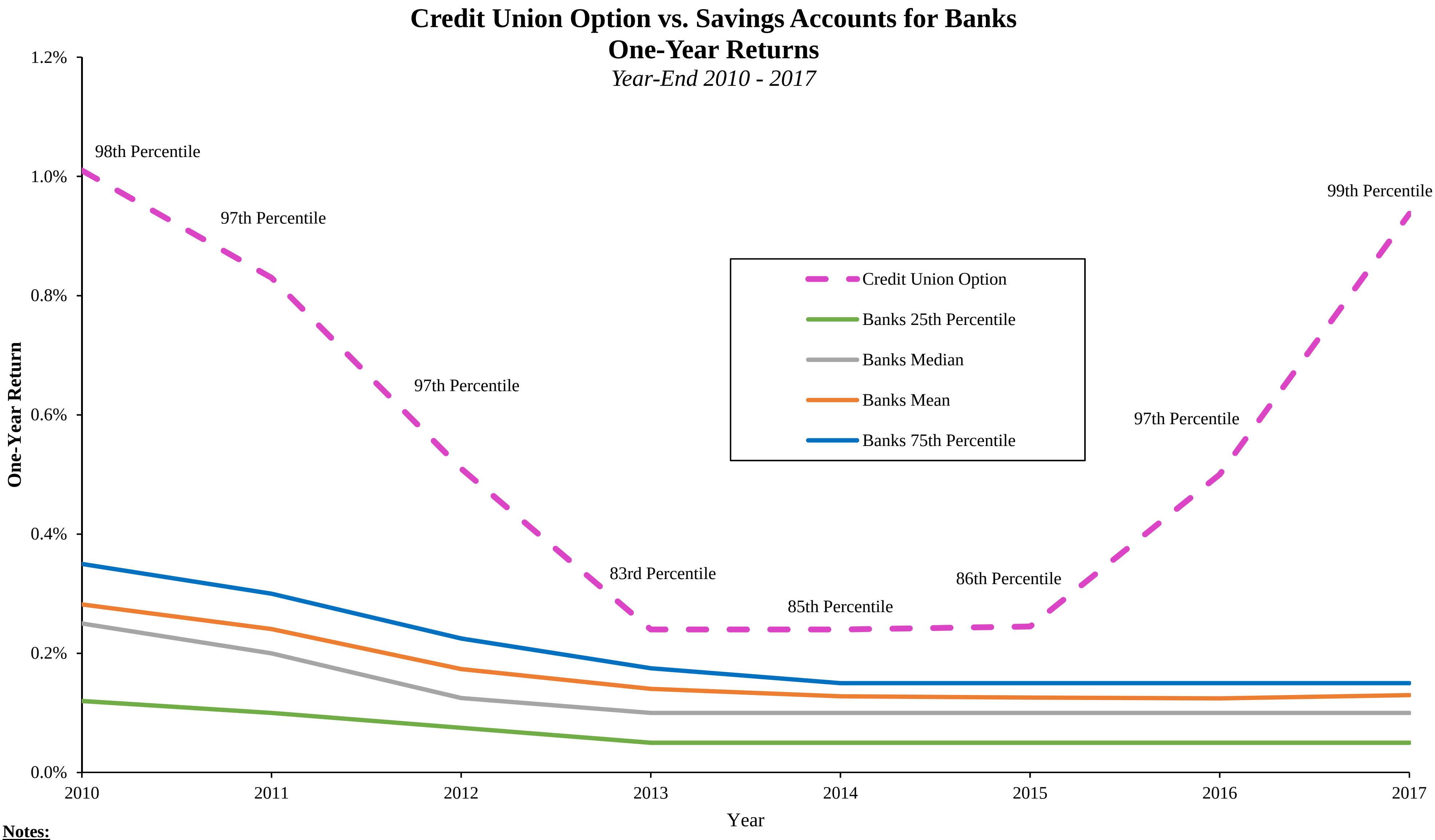
	Credit Union Option			Money Market Accounts for Credit Unions			
Year	**Return**	**Percentile Rank**	**Number of Credit Unions**	**25th Percentile**	**Median**	**Mean**	**75th Percentile**
2010	1.01%	96th Percentile	888	0.30%	0.45%	0.49%	0.63%
2011	0.83%	98th Percentile	1,020	0.18%	0.25%	0.31%	0.40%
2012	0.51%	95th Percentile	1,078	0.13%	0.19%	0.22%	0.28%
2013	0.24%	78th Percentile	1,239	0.10%	0.15%	0.17%	0.23%
2014	0.24%	80th Percentile	1,254	0.10%	0.15%	0.16%	0.20%
2015	0.25%	81th Percentile	1,299	0.10%	0.15%	0.16%	0.20%
2016	0.50%	98th Percentile	1,344	0.10%	0.15%	0.16%	0.20%
2017	0.94%	99th Percentile	1,376	0.10%	0.15%	0.18%	0.23%

Note:
[1] The annual return for the Credit Union Option is calculated by annualizing the available quarterly (for Q1 2010 through Q2 2015) and monthly (for July 2015 to December 2017) rates. Annual interest rates for each credit union's money market account are calculated by averaging the beginning and ending interest rate each year.

Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; S&P Global Market Intelligence.

Exhibit 11A

Exhibit 11A



Notes:

[1] The annual return for the Credit Union Option is calculated by annualizing the available quarterly (for Q1 2010 through Q2 2015) and monthly (for July 2015 to December 2017) rates. Annual interest rates for each bank's savings account are calculated by averaging the beginning and ending interest rate each year.

[2] Data prior to year-end 2010 were not available for savings accounts, so the reported value for that year is based on year-end rates rather than average annual rates.

Sources:

American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; S&P Global Market Intelligence.

Exhibit 11B

Exhibit 11B

Credit Union Option vs. Savings Accounts for Banks
One-Year Returns
Year-End 2010 - 2017

	Credit Union Option			Savings Accounts for Banks			
Year	**Return**	**Percentile Rank**	**Number of Banks**	**25th Percentile**	**Median**	**Mean**	**75th Percentile**
2010	1.01%	98th Percentile	2,268	0.12%	0.25%	0.28%	0.35%
2011	0.83%	97th Percentile	2,191	0.10%	0.20%	0.24%	0.30%
2012	0.51%	97th Percentile	2,378	0.08%	0.13%	0.17%	0.23%
2013	0.24%	83rd Percentile	3,291	0.05%	0.10%	0.14%	0.18%
2014	0.24%	85th Percentile	3,376	0.05%	0.10%	0.13%	0.15%
2015	0.25%	86th Percentile	3,466	0.05%	0.10%	0.13%	0.15%
2016	0.50%	97th Percentile	3,520	0.05%	0.10%	0.12%	0.15%
2017	0.94%	99th Percentile	3,474	0.05%	0.10%	0.13%	0.15%

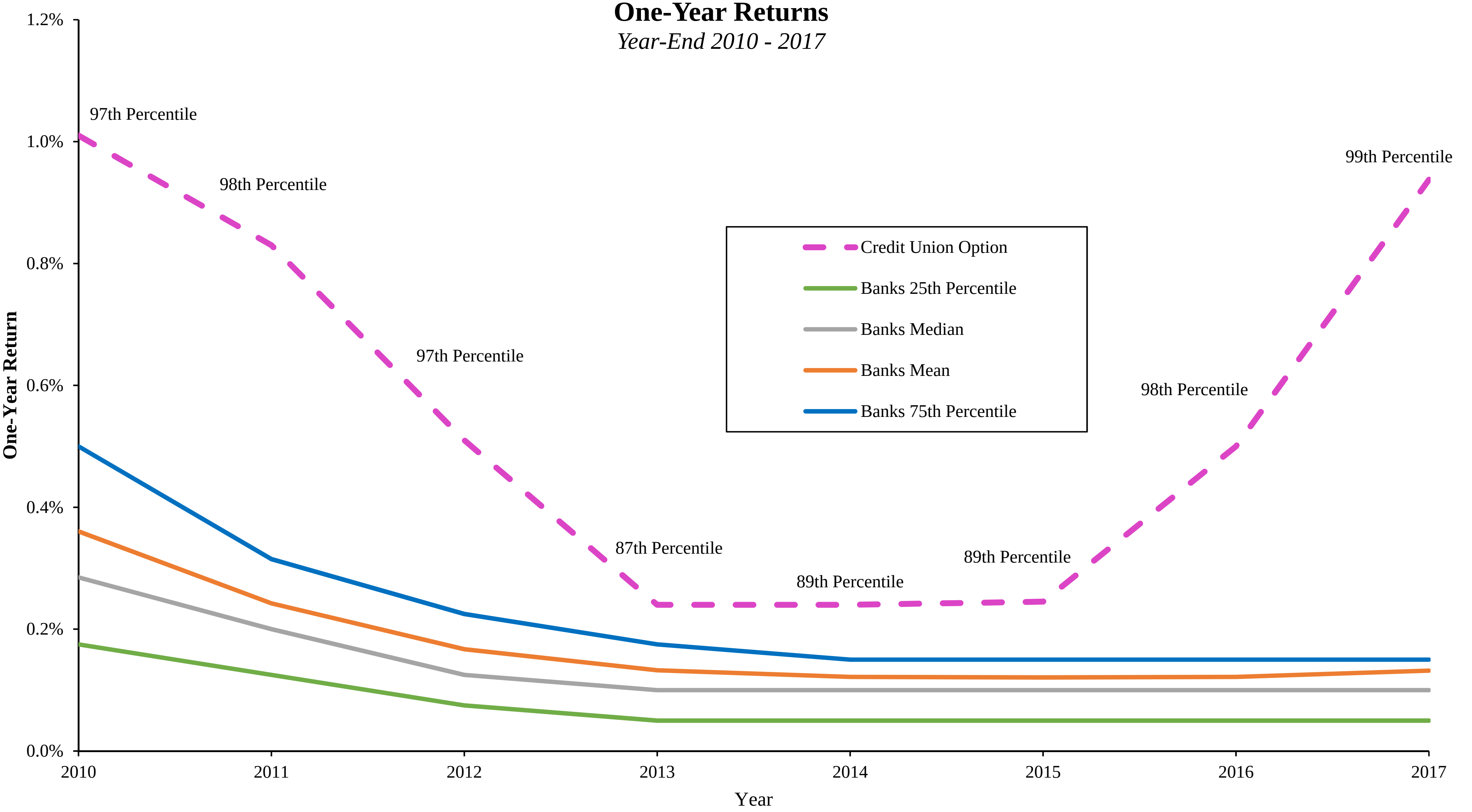
Notes:
[1] The annual return for the Credit Union Option is calculated by annualizing the available quarterly (for Q1 2010 through Q2 2015) and monthly (for July 2015 to December 2017) rates. Annual interest rates for each bank's savings account are calculated by averaging the beginning and ending interest rate each year.
[2] Data prior to year-end 2010 were not available for savings accounts, so the reported value for that year is based on year-end rates rather than average annual rates.

Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; S&P Global Market Intelligence.

Exhibit 12A

Exhibit 12A

Credit Union Option vs. Money Market Accounts for Banks
One-Year Returns
Year-End 2010 - 2017



Note:
[1] The annual return for the Credit Union Option is calculated by annualizing the available quarterly (for Q1 2010 through Q2 2015) and monthly (for July 2015 to December 2017) rates. Annual interest rates for each bank's money market account are calculated by averaging the beginning and ending interest rate each year.
Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; S&P Global Market Intelligence.

Exhibit 12B

Exhibit 12B

Credit Union Option vs. Money Market Accounts for Banks
One-Year Returns
Year-End 2010 - 2017

	Credit Union Option			Money Market Accounts for Banks			
Year	**Return**	**Percentile Rank**	**Number of Banks**	**25^{th} Percentile**	**Median**	**Mean**	**75^{th} Percentile**
2010	1.01%	97th Percentile	1,398	0.18%	0.29%	0.36%	0.50%
2011	0.83%	98th Percentile	1,956	0.13%	0.20%	0.24%	0.32%
2012	0.51%	97th Percentile	2,143	0.08%	0.13%	0.17%	0.23%
2013	0.24%	87th Percentile	3,023	0.05%	0.10%	0.13%	0.18%
2014	0.24%	89th Percentile	3,073	0.05%	0.10%	0.12%	0.15%
2015	0.25%	89th Percentile	3,111	0.05%	0.10%	0.12%	0.15%
2016	0.50%	98th Percentile	3,171	0.05%	0.10%	0.12%	0.15%
2017	0.94%	99th Percentile	3,123	0.05%	0.10%	0.13%	0.15%

Note:
[1] The annual return for the Credit Union Option is calculated by annualizing the available quarterly (for Q1 2010 through Q2 2015) and monthly (for July 2015 to December 2017) rates. Annual interest rates for each bank’s money market account are calculated by averaging the beginning and ending interest rate each year.

Sources:
American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx; S&P Global Market Intelligence.

Exhibit 13

Exhibit 13

Summary of Assets in Credit Union Option
Assets over $5,000 Priority Limit
Year-End 2010 - 2017

Year	Assets in Credit Union Option	Assets Over $5,000 Limit	Percentage of Assets Over $5,000 Limit	Participants In Credit Union Option	Participants With Excess	Percentage of Participants with Some Excess	Average Balance in Credit Union Option
2010	$1,255,308,660	$1,121,654,961	89.4%	36,511	22,062	60.4%	$34,382
2011	$1,695,159,828	$1,560,893,584	92.1%	34,794	23,032	66.2%	$48,720
2012	$1,259,885,678	$1,147,094,357	91.0%	30,538	18,780	61.5%	$41,256
2013	$1,145,443,114	$1,045,663,153	91.3%	26,269	16,665	63.4%	$43,604
2014	$1,059,795,166	$969,170,830	91.4%	23,713	15,310	64.6%	$44,693
2015	$769,083,595	$699,703,796	91.0%	18,369	11,824	64.4%	$41,869
2016	$802,374,073	$729,536,935	90.9%	19,535	12,802	65.5%	$41,074
2017	$684,756,349	$624,893,466	91.3%	16,885	10,249	60.7%	$40,554

Sources:

American Airlines Plan Participant Data; "Rate Disclosures – Checking," American Airlines Credit Union, <https://www.aacreditunion.org/wdg_disclosures.aspx>; Internet Archive Wayback Machine <https://web.archive.org/>.

Exhibit 14

Exhibit 14

Summary of Assets in Credit Union Option

Blended Rate Based on Assets Over and Under $5,000 Priority Checking Limit

Year-End 2010 - 2017

Year	Assets in Credit Union Option	Assets Over $5,000 Limit	Percentage of Assets Over $5,000 Limit	Percentage of Assets Under $5,000 Limit	Return for Assets Over $5,000 Limit[1]	Return for Assets Under $5,000 Limit[1]	AA Credit Union Priority Checking Account Blended Rate[2]	Credit Union Option Return for Plan Participants[3]	Difference
2010	$1,255,308,660	$1,121,654,961	89.4%	10.6%	0.05%	2.53%	0.31%	1.01%	0.70%
2011	$1,695,159,828	$1,560,893,584	92.1%	7.9%	0.05%	2.53%	0.25%	0.83%	0.58%
2012	$1,259,885,678	$1,147,094,357	91.0%	9.0%	0.05%	2.27%	0.25%	0.51%	0.26%
2013	$1,145,443,114	$1,045,663,153	91.3%	8.7%	0.05%	2.27%	0.24%	0.24%	0.00%
2014	$1,059,795,166	$969,170,830	91.4%	8.6%	0.05%	2.27%	0.24%	0.24%	0.00%
2015	$769,083,595	$699,703,796	91.0%	9.0%	0.05%	2.27%	0.25%	0.25%	-0.01%
2016	$802,374,073	$729,536,935	90.9%	9.1%	0.05%	2.27%	0.25%	0.50%	0.25%
2017	$684,756,349	$624,893,467	91.3%	8.7%	0.05%	2.27%	0.24%	0.94%	0.69%

Notes:

[1] The returns for assets over and under the $5,000 limit are obtained using the Wayback Machine for <http://www.aacreditunion.org/wdg_disclosures.aspx>, for the closest available date prior to the end of each year.

[2] The AA Credit Union Priority Checking Account Blended Rate is calculated using each participant's Credit Union Option balance. The formula is:
((Return for Assets Under $5,000 Limit)*(Percentage of Assets Under $5,000 Limit) + (Return for Assets Over $5,000 Limit)*(Percentage of Assets Over $5,000 Limit)) /
(Total Assets invested in the Credit Union Option in the Plan).

[3] Credit Union Option Return for Plan Participants is taken from the Quarterly Reports for 2010 - June 2015, and from 401k Dividend Rate - Jun '15 to Mar '18.xlsx for July 2015 - 2017.

Sources:

American Airlines Plan Participant Data; “Rate Disclosures – Checking,” American Airlines Credit Union, <https://www.aacreditunion.org/wdg_disclosures.aspx>; Internet Archive Wayback Machine <https://web.archive.org/>; American Airlines Plan Quarterly Reports; 401k Dividend Rate - Jun '15 to Mar '18.xlsx.

Exhibit 15

Exhibit 15

Investments in Capital Preservation Options
Participants who Joined the Plan after the Merger
Participant's First Quarter in the Plan[1]

Option	Assets	Count of Participants
Credit Union Option	$7,070,255	640
Fidelity Institutional Money Market Fund	$224,360	66
Stable Value Options[2]	$1,503,096	162
Capital Preservation Total	$8,797,711	754
Plan Total	$64,765,133	13,543
Percentage Invested in Capital Preservation	13.6%	5.6%
Percentage Invested in Capital Preservation that are in:		
Credit Union Option	80.4%	84.9%
Money Market Fund	2.6%	8.8%
Stable Value Options	17.1%	21.5%

Notes:

[1] A participant's first quarter in the Plan is the end of the quarter during which they joined the Plan. For Q1 2018, February 28th is used as the quarter-end date, as March data are not available.

[2] The stable value option in the Plan changed from the MIP II Class 3 to the American Airlines Stable Value Fund (which invested in the Wells Fargo Stable Value Fund W, a stable value commingled pool managed by Galliard) on June 30, 2017.

[3] This analysis includes all participants who first joined the Plan during or after October 2015, and who were not previously enrolled in a US Airways Plan during the period for which data are available.

[4] Some participants are invested in multiple capital preservation options, so the percentages of participants may sum to greater than 100%.

Sources:

American Airlines Plan Participant Data; American Airlines, Inc. 401(k) Plan / US Airways, Inc. Employee Savings Plan, “Re: Stable Value Investment Option Change,” May 2017.

Exhibit 16

Exhibit 16

Exchanges from the Fidelity Institutional Money Market Fund into Other Plan Options/Groups Following the Removal of the Fidelity Institutional Money Market Fund from the Plan

Q3 2016

	Assets		Participants	
Investment Option Category Transferred Into[1],[2]	**Millions**	**%**	**Count**	**%**
Target Date Funds (default option)	$44.5	78.9%	2,492	89.7%
Credit Union Option	$3.0	5.2%	58	2.1%
MIP II	$1.7	2.9%	29	1.0%
Other Non-Capital Preservation Options	$4.0	7.0%	149	5.4%
Untraceable	$3.3	5.9%	100	3.6%
Total Exchanged From Fidelity Institutional Money Market Fund	**$56.4**	**100.0%**	**2,779**	**-**

Notes:

[1] For this analysis, all Target Date funds are grouped together. Similarly, all options other than the Target Date funds and capital preservation options are grouped together.

[2] In this analysis, I trace transfers from the FIMM to other Investment Option Category(ies) as follows.

(i) If a participant made a transfer in Q3 2016 from the FIMM that matches the dollar amount of a transfer to an Investment Option Category during the same quarter, that Investment Option Category is the transfer destination.

(ii) If all of the transfers that a participant made in Q3 2016 were transfers from the FIMM, then the Investment Option Category(ies) that received transfers during Q3 2016 are considered the destination Investment Option Category(ies).

(iii) If all of a participant’s transfers during Q3 2016 went into the same Investment Option Category, then that Investment Option Category is the destination for any Q3 2016 transfers from the FIMM.

(iv) All other transfers are not traceable.

Source:

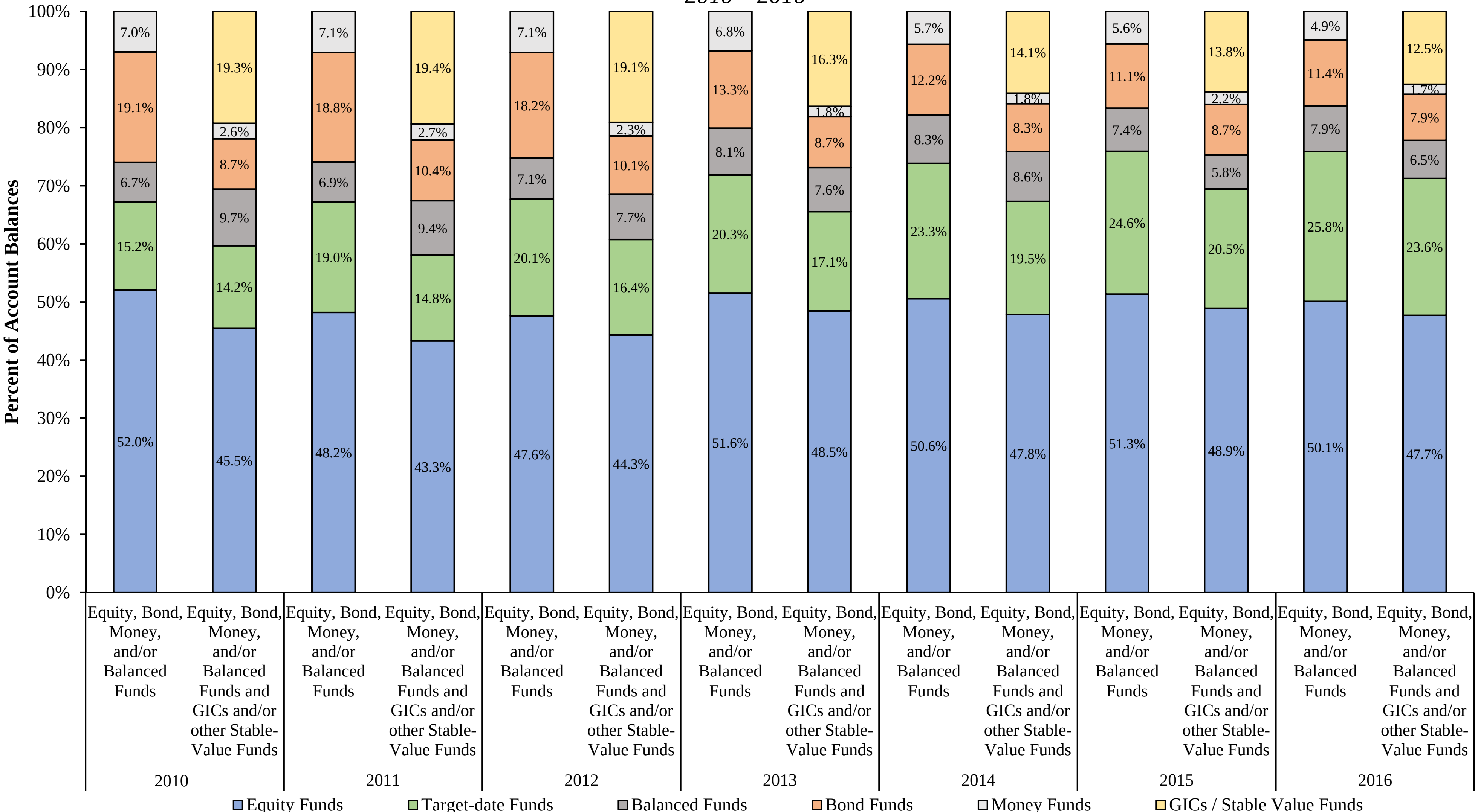
American Airlines Plan Participant Data.

Exhibit 17A

Exhibit 17A

Asset Allocation for 401(k) Plans with and without Stable Value Options in Their Lineup

2010 – 2016



Note:

[1] In the EBRI publications, the asset allocations do not sum to 100% because according to EBRI, minor investment options are not shown. Therefore, for this analysis I rescale the asset allocations so that that the asset allocation for all the categories sums to 100%.

Source:

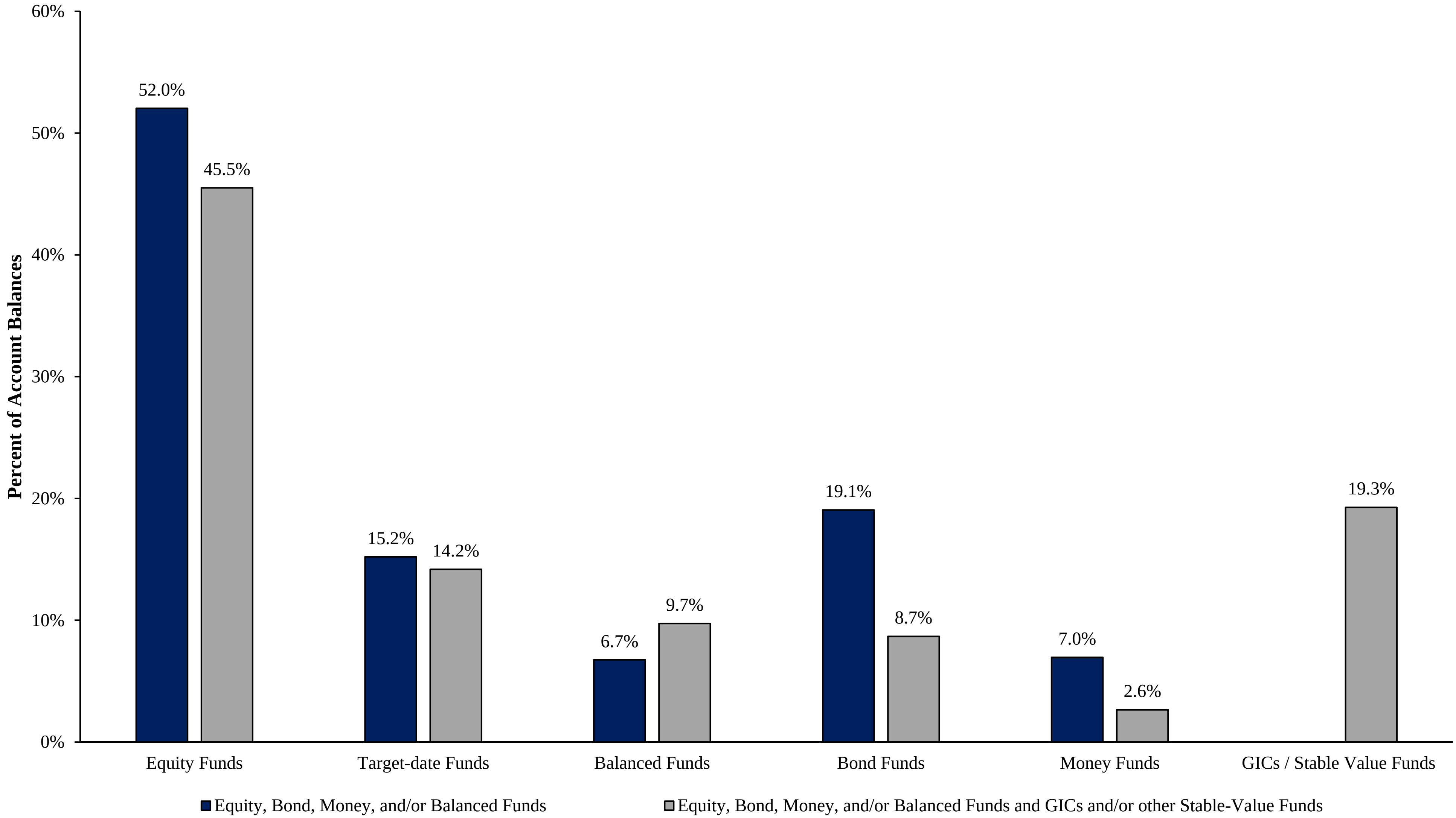
EBRI 401k Plan Asset Allocation, Account Balances, and Loan Activity (2010–2016).

Exhibit 17B

Exhibit 17B

Asset Allocation for 401(k) Plans with and without Stable Value Options in Their Lineup

2010



Note:

[1] In the EBRI publications, the asset allocations do not sum to 100% because according to EBRI, minor investment options are not shown. Therefore, for this analysis I rescale the asset allocations so that that the asset allocation for all the categories sums to 100%.

Source:

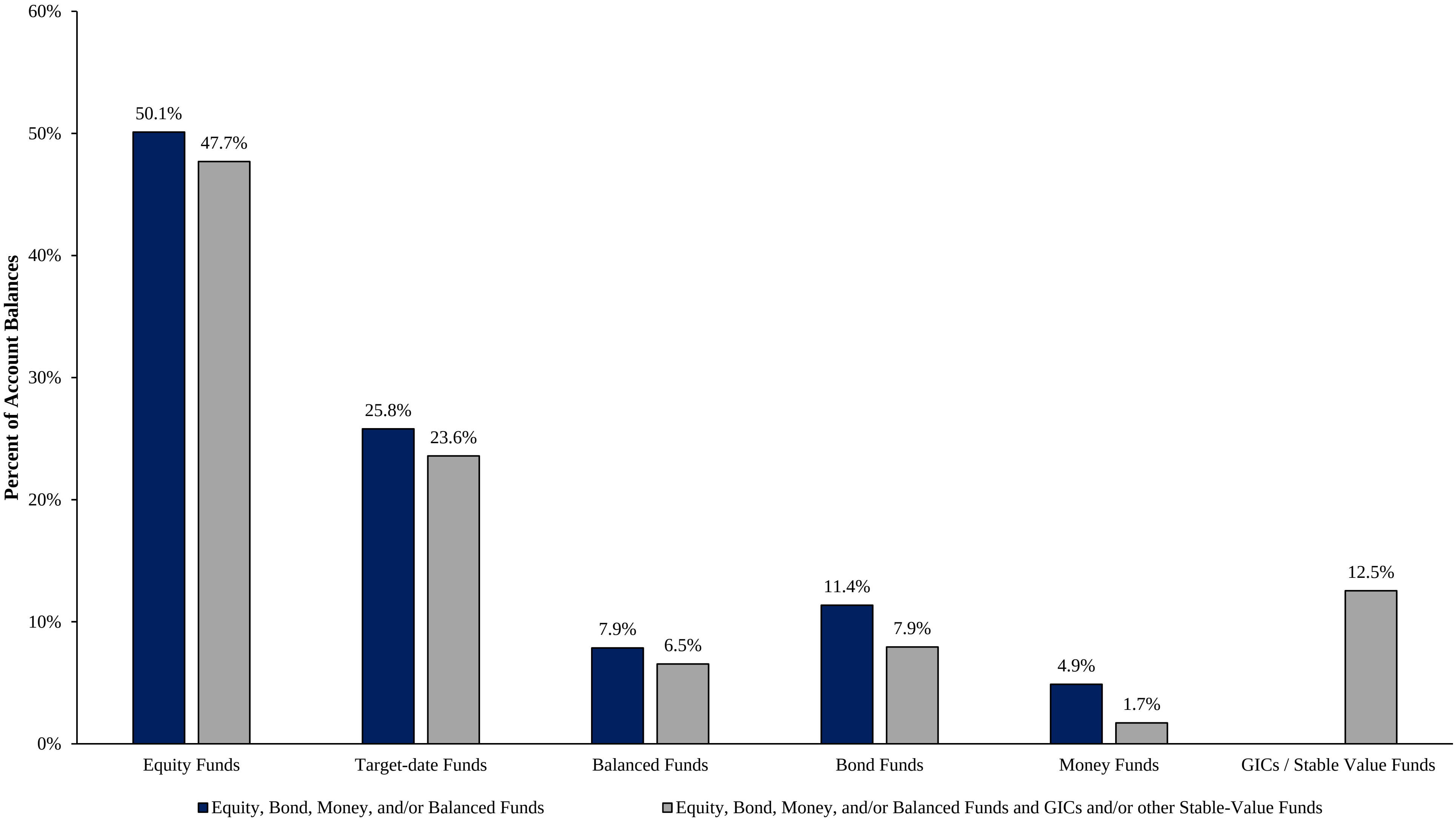
EBRI 401k Plan Asset Allocation, Account Balances, and Loan Activity (2010).

Exhibit 17C

Exhibit 17C

Asset Allocation for 401(k) Plans with and without Stable Value Options in Their Lineup

2016



Note:

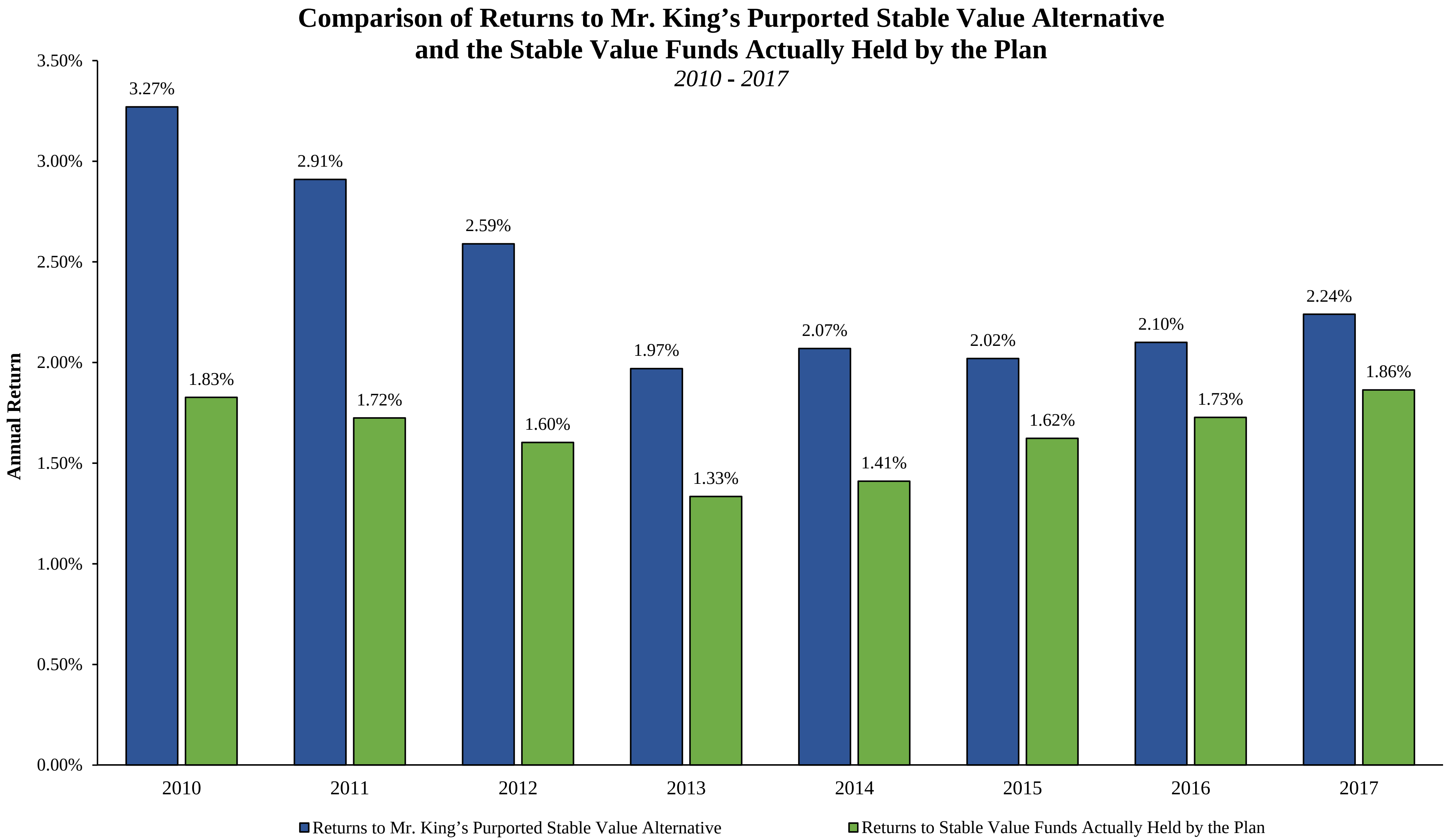
[1] In the EBRI publications, the asset allocations do not sum to 100% because according to EBRI, minor investment options are not shown. Therefore, for this analysis I rescale the asset allocations so that that the asset allocation for all the categories sums to 100%.

Source:

EBRI 401k Plan Asset Allocation, Account Balances, and Loan Activity (2016).

Exhibit 18A

Exhibit 18A



Notes:

[1] Returns to Mr. King's Purported Stable Value Alternative are reported in Exhibit 1 of the King Report.

[2] Returns to Stable Value Funds Actually Held by the Plan include the MIP II CL 3 from 2010 through Q2 2017, and the American Airlines Stable Value Option from Q3 2017 through Q4 2017.

Sources:

Morningstar Direct; King Report, Exhibit 1.

Exhibit 18B

Exhibit 18B

Corrected Plaintiff-Style "Losses"
Credit Union Option

2010 - 2017

Date	Credit Union Option Balance	Credit Union Option Performance	But-For SV Performance	Estimated Cash Flow	But-For Stable Value Balance	Quarterly "Loss"	Cumulative "Loss"
12/31/2009	$1,266,450,657				$ 1,266,450,657		
3/31/2010	$1,242,987,853	0.25%	0.40%	($ 26,628,930)	$1,244,932,362	$ 1,944,508	$ 1,944,508
6/30/2010	$1,364,136,695	0.25%	0.44%	$ 118,041,372	$1,368,471,953	$ 2,390,749	$ 4,335,258
9/30/2010	$1,350,562,464	0.27%	0.48%	($ 17,257,400)	$1,357,738,811	$ 2,841,089	$ 7,176,347
12/31/2010	$1,255,308,660	0.24%	0.49%	($ 98,495,154)	$1,265,933,332	$ 3,448,324	$ 10,624,671
3/31/2011	$1,277,017,199	0.25%	0.43%	$ 18,570,267	$1,289,937,124	$ 2,295,253	$ 12,919,925
6/30/2011	$1,335,335,167	0.21%	0.41%	$ 55,636,232	$1,350,834,403	$ 2,579,311	$ 15,499,236
9/30/2011	$1,763,368,851	0.19%	0.43%	$ 425,496,547	$1,782,153,289	$ 3,285,203	$ 18,784,438
12/31/2011	$1,695,159,828	0.18%	0.45%	($ 71,383,086)	$1,718,705,401	$ 4,761,134	$ 23,545,572
3/31/2012	$1,237,604,461	0.13%	0.42%	($ 459,759,075)	$1,266,247,386	$ 5,097,353	$ 28,642,925
6/30/2012	$1,229,628,618	0.12%	0.40%	($ 9,460,968)	$1,261,863,247	$ 3,591,704	$ 32,234,629
9/30/2012	$1,220,319,587	0.13%	0.39%	($ 10,907,549)	$1,255,896,019	$ 3,341,804	$ 35,576,432
12/31/2012	$1,259,885,678	0.13%	0.38%	$ 37,979,676	$1,298,601,268	$ 3,139,157	$ 38,715,589
3/31/2013	$1,146,314,390	0.06%	0.35%	($ 114,327,219)	$1,188,791,908	$ 3,761,928	$ 42,477,518
6/30/2013	$1,144,496,400	0.06%	0.34%	($ 2,505,779)	$1,190,339,755	$ 3,365,837	$ 45,843,355
9/30/2013	$1,290,907,641	0.06%	0.32%	$ 145,724,542	$1,339,820,189	$ 3,069,193	$ 48,912,548
12/31/2013	$1,145,443,114	0.06%	0.32%	($ 146,239,071)	$1,197,918,772	$ 3,563,110	$ 52,475,658
3/31/2014	$1,108,673,630	0.06%	0.32%	($ 37,456,750)	$1,164,328,257	$ 3,178,969	$ 55,654,627
6/30/2014	$1,088,426,957	0.06%	0.34%	($ 20,911,877)	$1,147,395,926	$ 3,314,342	$ 58,968,969
9/30/2014	$1,092,612,528	0.06%	0.36%	$ 3,532,515	$1,155,110,033	$ 3,528,536	$ 62,497,505
12/31/2014	$1,059,795,166	0.06%	0.37%	($ 33,472,929)	$1,125,959,133	$ 3,666,461	$ 66,163,967
3/31/2015	$1,034,995,855	0.06%	0.39%	($ 25,435,189)	$1,104,873,468	$ 3,713,647	$ 69,877,613
6/30/2015	$1,115,294,192	0.06%	0.40%	$ 79,677,340	$1,188,969,551	$ 3,797,745	$ 73,675,359
9/30/2015	$1,491,749,141	0.06%	0.41%	$ 375,758,542	$1,569,646,491	$ 4,221,992	$ 77,897,351
12/31/2015	$769,083,595	0.06%	0.41%	($ 723,597,017)	$852,544,185	$ 5,563,240	$ 83,460,591
3/31/2016	$766,627,671	0.12%	0.41%	($ 3,415,478)	$852,665,674	$ 2,577,412	$ 86,038,003
6/30/2016	$763,075,550	0.12%	0.44%	($ 4,508,612)	$851,879,237	$ 2,765,685	$ 88,803,688
9/30/2016	$767,385,507	0.12%	0.44%	$ 3,357,898	$858,962,710	$ 2,773,516	$ 91,577,204
12/31/2016	$802,374,073	0.12%	0.43%	$ 34,031,130	$896,670,278	$ 2,719,002	$ 94,296,205
3/31/2017	$735,887,991	0.19%	0.41%	($ 67,986,321)	$832,342,847	$ 2,158,651	$ 96,454,856
6/30/2017	$713,035,627	0.25%	0.43%	($ 24,685,225)	$811,251,012	$ 1,760,529	$ 98,215,385
9/30/2017	$767,042,976	0.25%	0.50%	$ 52,231,405	$867,499,684	$ 2,241,323	$ 100,456,708
12/31/2017	$684,756,349	0.25%	0.52%	($ 84,197,085)	$787,781,196	$ 2,568,139	$ 103,024,847

Notes:

[1] This analysis uses the Form 5500 for Q4 2009 assets, and the participant data for Q1 2010 - Q4 2017 assets.

[2] The but-for stable value option is the MIP II CL 3 from 2010 through Q2 2017, and the American Airlines Stable Value Option from Q3 2017 through Q4 2017.

Sources:

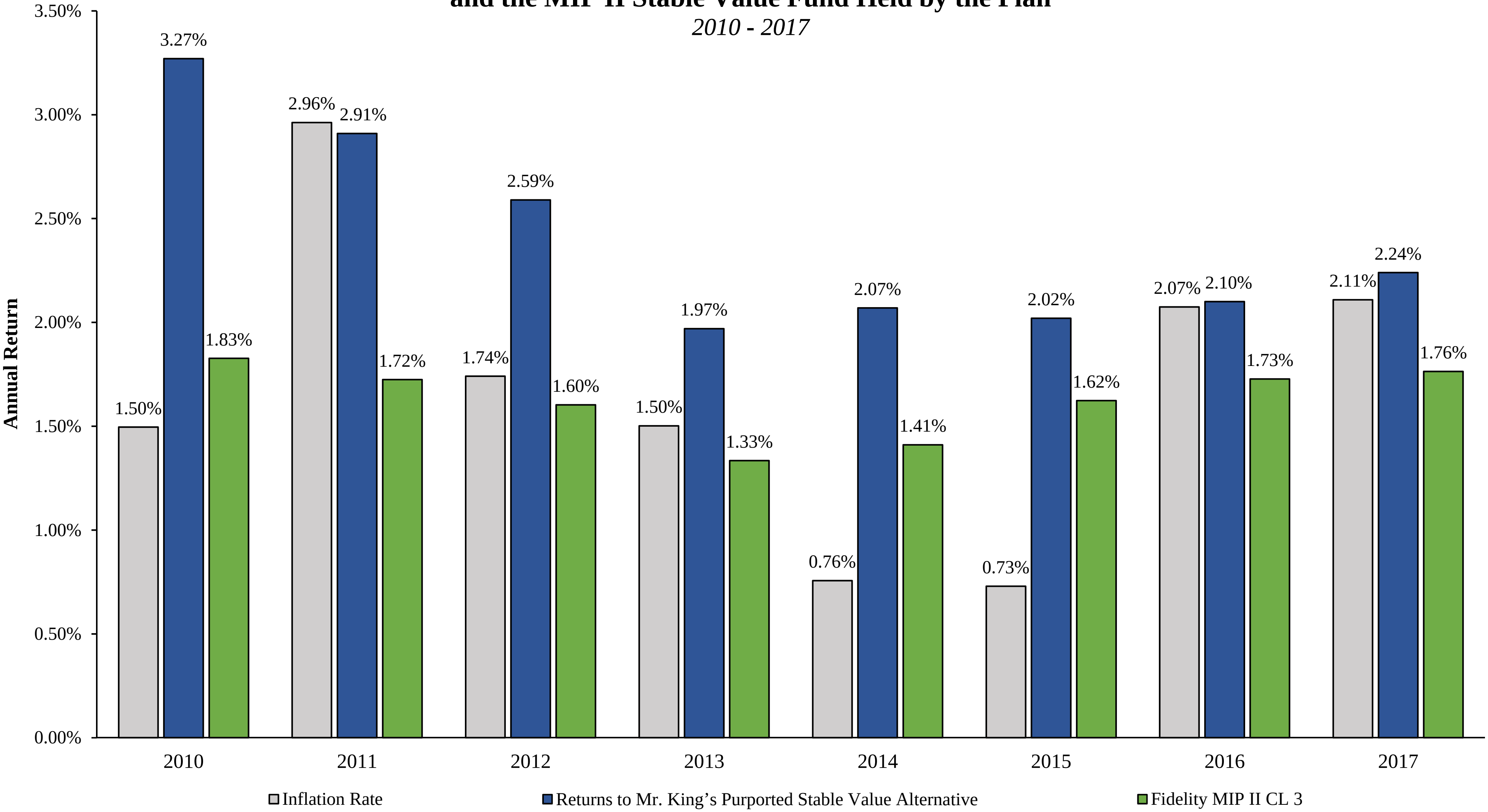
King Report, Exhibit 2; American Airlines Plan Participant Data; 2009 American Airlines, Inc. Form 5500; Morningstar Direct; American Airlines Employee Benefit Plans Quarterly Reports, 2010 – 2015; 401k Dividend Rate - Jun '15 to Mar '18.xlsx.

Exhibit 19

Exhibit 19

Comparison of Inflation Rate to the Returns to Mr. King's Purported Stable Value Alternative and the MIP II Stable Value Fund Held by the Plan

2010 - 2017



Notes:

[1] Returns to Mr. King's Purported Stable Value Alternative are reported in Exhibit 1 of the King Report.

[2] The CPI-All Urban Consumers: All Items in U.S. City Average (not seasonally adjusted) is used as a measure of inflation..

Sources:

Morningstar Direct; King Report, Exhibit 1; U.S. Bureau of Labor Statistics, "Consumer Price Index for All Urban Consumers: All Items in U.S. City Average," retrieved from FRED, Federal Reserve Bank of St. Louis.

Appendix A

Appendix A
Curriculum Vitae

WALTER N. TOROUS

Massachusetts Institute of Technology

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Cambridge, MA, 02139
Telephone: (Office) (617) 324-7027

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Home Address

75 Cambridge Parkway, Unit E801
Cambridge, MA, 02142
Telephone: (310) 873-8325

Academic Degrees

B. Math.	University of Waterloo, Statistics and Economics, 1976
Ph. D.	University of Pennsylvania, Economics, 1981 Dissertation Title “Differential Taxation and the Equilibrium Structure of Interest Rates” Supervisor: Robert J. Shiller Awarded William Polk Carey Prize for Best Doctoral Dissertation

Academic Appointments

1980-81	Graduate School of Business Administration, University of Michigan, Lecturer
1981-85	Graduate School of Business Administration, University of Michigan, Assistant Professor
1986-87	Graduate School of Management, University of California, Los Angeles, Visiting Assistant Professor
1987-90	Graduate School of Management, University of California, Los Angeles, Assistant Professor
1990-95	John E. Anderson Graduate School of Management, University of California, Los Angeles, Associate Professor

1995-97 London Business School, Corporation of London Professor of Finance

1995-2006 John E. Anderson Graduate School of Management, University of California, Los Angeles, Professor

1997-2003 Director, Richard S. Ziman Real Estate Center, John E. Anderson Graduate School of Management, University of California, Los Angeles

2006-2012 John E. Anderson Graduate School of Management, University of California, Los Angeles, Lee and Seymour Graff Endowed Professor

2009-2011 Visiting Professor
Center for Real Estate
Massachusetts Institute of Technology, Cambridge, MA

2012- Senior Lecturer
Center for Real Estate / Sloan School of Management
Massachusetts Institute of Technology, Cambridge, MA

Professional Activities

Journal of Housing Economics, Associate Editor, 1991 -
Journal of Real Estate Finance and Economics, Associate Editor, 1992 -
Real Estate Economics,
Associate Editor, 1993 - 2005, 2015 -
Editor, 2006 - 2014
Pacific-Basin Finance Journal, Associate Editor, 1997- 2003
Economic Notes, Associate Editor, 1999 - 2011

Ad hoc referee for Journal of Finance, Journal of Financial and Quantitative Analysis, Journal of Banking and Finance, Journal of Business, Review of Financial Studies, Journal of Financial Economics, Journal of Money, Credit, and Banking, Management Science, Journal of Empirical Finance, Journal of International Money and Finance

Member:
American Finance Association, 1980 -
American Real Estate and Urban Economics Association, 1990 -
Western Finance Association, 1980 -
Associate Program Chair, 1990
Board of Directors, 1991-94

Refereed Publications

1. Ball, C. A., and Torous, W. N., "A Simplified Jump Process for Common Stock Returns," Journal of Financial and Quantitative Analysis, 18:1, pp. 53-65, March 1983.

2. Ball, C. A., and Torous, W. N., "Bond Price Dynamics and Options," Journal of Financial and Quantitative Analysis, 18:4, pp. 517-531, December 1983.

3. Ball, C. A., and Torous, W. N., "The Maximum Likelihood Estimation of Security Price Volatility: Theory, Evidence, and Application to Option Pricing," Journal of Business, 57:1, pp. 97-112, January 1984.

4. Milne, W. J., and Torous, W. N., "Long-Term Interest Rates and the Price Level: The Canadian Evidence on the Gibson Paradox," Canadian Journal of Economics, 17:2, pp. 327-339, May 1984.

5. Ball, C. A., Torous, W. N., and Tschoegl, A. E., "On Inferring Standard Deviations from Path Dependent Options," Economic Letters, 18, pp. 377-380, 1985.

6. Ball, C. A., Torous, W. N., and Tschoegl, A. E., "The Degree of Price Resolution: The Case of the Gold Market," Journal of Futures Markets, 5:1, pp.29-43, Spring 1985.

7. Ball, C. A., Torous, W. N., and Tschoegl, A. E., "An Empirical Investigation of the EOE Gold Options Market," Journal of Banking and Finance, 9:1, pp. 101-113, March 1985.

8. Ball, C. A., and Torous, W. N., "On Jumps in Common Stock Prices and Their Impact on Call Option Pricing," Journal of Finance, 40:1, pp. 155-173, March 1985.

9. Torous, W. N., "Differential Taxation and the Equilibrium Structure of Interest Rates," Journal of Banking and Finance, 9, pp. 363-385, August 1985.

   Reprinted in The Debt Market, S. Ross (Editor), Edward Elgar, 2000.

10. Ball, C. A., and Torous, W. N., "Futures Options and the Volatility of Futures Prices," Journal of Finance, 41:4, pp. 857-870, September 1986.

11. Ball, C. A., and Torous, W. N., "Investigating Security Price Performance in the Presence of Event Date Uncertainty," Journal of Financial Economics, 22, pp. 123-153, October 1988.

12. Schwartz, E. S., and Torous, W. N., "Prepayment and the Valuation of Mortgage-Backed Securities," Journal of Finance, 44:2, pp. 375-392, June 1989.

13. Titman, S., and Torous, W. N., "Valuing Commercial Mortgages: An Empirical Investigation of the Contingent-Claims Approach to Valuing Commercial Mortgages," Journal of Finance, 44:2, pp. 345-373, June 1989.

    Reprinted in The Debt Market, S. Ross (Editor), Edward Elgar, 2000.

14. Franks, J. R., and Torous, W. N., "An Empirical Investigation of U.S. Firms in Reorganization," Journal of Finance, 44:3, pp. 747-769, July 1989.

Reprinted in Corporate Bankruptcy and Distressed Restructurings: Analytical Issues and Investment Opportunities, E. Altman (Editor), Irwin, 1992.

15. Schwartz, E. S., and Torous, W. N., "Valuing Stripped Mortgage-Backed Securities," Housing Finance Review, 8, pp. 241-251, Fall 1989.

Reprinted in The Debt Market, S. Ross (Editor), Edward Elgar, 2000.

16. Haugen, R. A., Talmor, E., and Torous, W. N., "The Effect of Volatility Changes on the Level of Stock Prices and Subsequent Expected Returns," Journal of Finance, 46:8, pp. 985-1007, July 1991.

17. Geske, R. L., and Torous, W. N., "Skewness, Kurtosis, and Black-Scholes Option Mispricing," Statistical Papers, 32, pp. 299-309, December 1991.

18. Schwartz, E. S., and Torous, W. N., "Prepayment, Default, and the Valuation of Mortgage Pass-Through Securities," Journal of Business, 65:2, pp. 221-239, April 1992.

19. Franks, J. R., and Torous, W. N., "Lessons from a Comparison of U.S. and U.K. Insolvency Codes," Oxford Review of Economic Policy, 8:3, pp. 70-82, September 1992.

Reprinted in Journal of Applied Corporate Finance, pp. 95-103, January 1993.

20. Schwartz, E. S., and Torous, W. N., "Mortgage Prepayment and Default Decisions: A Poisson Regression Approach", Journal of the American Real Estate and Urban Economics Association, 21:4, pp. 431-448, March 1993.

21. Franks, J. R., and Torous, W. N., "A Comparison of Financial Recontracting in Workouts and Chapter 11 Reorganizations," Journal of Financial Economics, 28:8, pp. 349-370, June 1994.

Reprinted in Studies in Empirical Corporate Finance, M. Brennan (Editor), Edward Elgar, 2001.

22. Ball, C. A., and Torous, W. N., "On Unit Roots and the Estimation of Interest Rate Dynamics", Journal of Empirical Finance, 3:2, pp. 215-238, June 1996.

23. Franks, J. R., Nyborg, K., and Torous, W. N., "A Comparison of U. K, U. S., and German Insolvency Codes," Financial Management, 25:3, pp. 274-301, Autumn 1996.

24. Roma, A., and Torous, W. N., "On the Cyclical Behavior of Interest Rates," Journal of Finance, 52:4, pp. 1519-1542, September 1997.

25. Brennan, M. J., and Torous, W. N., "Individual Decision Making and Investor Welfare," Economic Notes, 28:2, pp. 119-143, July 1999.

26. Ball, C. A., and Torous, W. N., "The Stochastic Volatility of Short-term Interest Rates: Some International Evidence," Journal of Finance, 54:6, pp. 2339-2359, December 1999.

Reprinted in Model Risk: Concepts, Calibration, and Pricing, R. Gibson (Editor), Risk Books, 2000.

27. Ball, C. A., and Torous, W. N., "Stochastic Correlation Across International Stock Markets," Journal of Empirical Finance, 7:3-4, pp. 373-388, November 2000.

28. Torous, W. N., Yan, S. and Valkanov, R., "On Predicting Stock Returns with Nearly Integrated Explanatory Variables," Journal of Business, 77:4, pp. 937-966, October 2004.

29. Dierker, M., Quan, D., and Torous, W. N., "Pricing the Defeasance Option in Securitized Commercial Mortgages," Real Estate Economics, 33:4, pp. 663-680, Winter 2005.

30. Berardi, A., and Torous, W. N., "Term Structure Forecasts of Long Term Consumption Growth," Journal of Financial and Quantitative Analysis, 40:2, pp. 241-258, June 2005.

31. Brennan, M. J., Lee, F., and Torous, W. N., "Dollar Cost Averaging", Review of Finance, 9:4, pp. 509-535, 2005.

32. Hong, H, Torous, W. N., and Valkanov, R., "Do Industries Lead Stock Markets?", Journal of Financial Economics, 83:2, pp. 367-396, 2007.

33. Schwartz, E. S., and Torous, W. N., "Commercial Office Space: Testing the Implications of Real Options Model with Competitive Interactions", Real Estate Economics, 35:1, pp. 1-20, 2007.

Awarded Edwin S. Mills Prize for best paper in Real Estate Economics for 2007.

34. Plazzi, A., Torous, W. N., and Valkanov, R., "The Cross-Sectional Dispersion of Commercial Real Estate Returns and Rent Growth: Time Variation and Economic Fluctuations", Real Estate Economics, 36:3, pp. 403-429, 2008.

35. Plazzi, A., Torous, W. N., and Valkanov, R., "Expected Returns and the Expected Growth in Rents of Commercial Real Estate", Review of Financial Studies, 23:9, pp. 3469-3519, 2010.

36. Plazzi, A., Torous, W.N., and Valkanov, R., "Exploiting Property Characteristics in Commercial Real Estate Portfolio Allocation", Journal of Portfolio Management, Special Real Estate Issue, pp. 39-50, 2011.

37. Linnainmaa, J. T., Torous, W. N., and Yae, J., "Reading the Tea Leaves: Model Uncertainty, Robust Forecasts and the Autocorrelation of Analysts' Forecast Errors" Journal of Financial Economics, 122:1, pp. 42-64, 2016.

38. Ghent, A., Torous, W. N., and Valkanov, R., "Complexity in Structured Finance", Review of Economic Studies, 86:2, pp. 694-722, 2019.

39. Ghent, A., Torous, W. N., and Valkanov, R., "Commercial Real Estate as an Asset Class", Annual Review of Financial Economics, 11, pp. 153-171, 2019.

40. Ghent, A., Miltersen, K., and Torous, W. N., "Second Mortgages: Valuation and Implications for the Performance of Structured Financial Products", forthcoming, Real Estate Economics, 2020.

Chapters in Books

41. Geske, R. L., and Torous, W. N., "Black-Scholes Option Pricing and Robust Variance Estimation," pp. 49-69, in Options: Recent Advances in Theory and Practice, S. Hodges (Editor), Manchester University Press, 1990.

42. Schwartz, E. S., and Torous, W. N., "Caps on Adjustable Rate Mortgages: Valuation, Insurance, and Hedging," pp. 283-303, in Financial Markets and Financial Crises, R. G. Hubbard (Editor), University of Chicago Press, 1991.

43. Betker, B. L., Franks, J. R., and Torous, W. N., "Are Stockholders Better Off When Debt is Restructured Privately?", pp. 391-400, in Corporate Bankruptcy and Distressed Restructuring: Analytical Issues and Investment Opportunities, E. Altman (Editor), Irwin, 1992.

44. Torous, W. N., "Mortgage Backed Securities," in North-Holland Handbook of Operations Research and Management Science, R. A. Jarrow, V. Maksimmovic, and W. T. Ziemba (Editors), North-Holland, 1995.

45. Franks, J. R., Nyborg, K, and Torous, W. N., "A Tale of Three Codes: A Comparison of U. K., U. S., and German Insolvency Codes," in Mastering Finance, H. Rose (Editor), Pittman Publishing, 1998.

46. Torous, W. N. "The Behaviour of Short Term Interest Rates," in Mastering Finance, H. Rose (Editor), Pittman Publishing, 1998.

47. Schwartz, E. S., and Torous, W. N., "Can We Disentangle Risk Aversion from Intertemporal Substitution in Consumption?", in Essays on Uncertainty: Festschrift in Honor of Steinar Ekern, Norges Handelshoyskole, Bergen, Norway, 2002.

48. Ghysels, E., Plazzi, A., Torous, W. N., and R. Valkanov, R., "Forecasting Real Estate Prices", in Handbook of Economic Forecasting, Volume 2A, G. Elliott and A. Timmermann (Editors), North-Holland, 2013.

Working Papers

49. Agarwal, Sumit, Crocker Liu, Walter Torous, and Vincent Yao, "Household Financial Decision Making when Buying and Owning a Home," 2015.

50. Boudry, W., Liu, C., Mulhofer, T., and Torous, W.N., "Using Cash Flow Dynamics to Price Thinly Traded Assets", 2017.

51. Plazzi, J, and Torous, W.N., "Does Corporate Governance Matter? Evidence from the AGR Governance Rating", 2017.

Appendix B

Appendix B
WALTER N. TOROUS

List of Testimony and Expert Submissions in the Last Four Years

2019 - *Homeward Residential, Inc., solely in its capacity as Master Servicer for the Option One Mortgage Loan Trust 2006-2, for the benefit of the Trustee and the holders of Option One Mortgage Loan Trust 2006-2 Certificates against Sand Canyon Corporation f/k/a Option One Mortgage Corporation*, United States District Court for the Southern District of New York, No. 12-CV-5067.
Provided expert report and deposition testimony.

2019 - *Homeward Residential, Inc., solely in its capacity as Servicer for the Option One Mortgage Loan Trust 2006-3, for the benefit of the Trustee and the holders of Option One Mortgage Loan Trust 2006-3 Certificates, against Sand Canyon Corporation f/k/a Option One Mortgage Corporation*, United States District Court for the Southern District of New York, No. 12-CV-7319.
Provided expert report and deposition testimony.

2019 - *Federal Deposit Insurance Corporation as Receiver for Guaranty Bank v. Deutsche Bank Securities Inc., et al.*, United States District Court for the Western District of Texas Austin Division, No. 1:14-cv-00129-SS.
Provided expert report and deposition testimony.

2019 - *National Credit Union Administration Board, et al. v. HSBC Bank USA, National Association*, United States District Court for the Southern District of New York, No. 15-cv-2144.
Provided expert report.

2019 - *In Re Vale S.A. Securities Litigation*, United States District Court for the Southern District of New York, No. 1:11-cv-09539-GHW.
Provided expert report and deposition testimony.

2019 - *Megan Villella, et al. v. Chemical and Mining Company of Chile Inc., et al.*, United States District Court for the Southern District of New York, Case no. 1:15-cv-02106-ER-GWG.
Provided expert report and deposition testimony.

2019 - *In re American Realty Capital Properties, Inc. Litigation*, United States District Court for the Southern District of New York, Case no. 1:15-mc-00040-AKH. Provided expert report and deposition testimony.

2019 - *In re Sunedison, Inc. Securities Litigation*, United States District Court for the Southern District of New York, Case no. 1:16-MD-2742-PKC.
Provided expert report.

2018 - *Federal Home Loan Bank of Boston v. Ally Financial, Inc. F/K/A GMAC LLC, et al.*, United States District Court for the District of Massachusetts, Case No. 1:11-cv-10952-GAO.
Provided expert report and deposition testimony.

2018 - *United States of America v. Quicken Loans Inc.*, United States District Court for the Eastern District of Michigan, Civil Action No. 16-14050-MAG-RSW.
Provided expert report and deposition testimony.

2018 - *Gurbir S. Grewal, et al. v. Credit Suisse Securities (USA) LLC, et al.*, Superior Court of the State of New Jersey Chancery Division Mercer County, Civil Action No. MER-C-137-13.
Provided expert report and deposition testimony.

2018 - *U.S. Bank National Association, solely in its capacity as Trustee of the CSMC Asset-Backed Trust 2007-NC1 (CSMC 2007-NC1) v. DLJ Mortgage Capital, Inc.*, Supreme Court of the State of New York County of New York, Index No. 652699/2013. Provided expert report and deposition testimony.

2018 - *U.S. Bank National Association, solely in its capacity as Trustee of the Home Equity Asset Trust 2006-8 (HEAT 2006-8) v. DLJ Mortgage Capital, Inc.*, Supreme Court of the State of New York County of New York, Index No. 654157/2012.
Provided expert report and deposition testimony.

2018 - *U.S. Bank National Association, solely in its capacity as Trustee of the Home Equity Asset Trust 2007-2 (HEAT 2007-2) v. DLJ Mortgage Capital, Inc.*, Supreme Court of the State of New York County of New York, Index No. 651174/2013.
Provided expert report and deposition testimony.

2018 - *Residential Funding Company, LLC v. Home Loan Center, Inc.*, United States District Court for the District of Minnesota, Case No. 14-cv-01716 (SRN/HB).
Provided expert report and deposition testimony.

2018 - *Residential Funding Company, LLC v. Decision One Mortgage Company, LLC*, United States District Court for the District of Minnesota, Case No. 14-cv-1737 (MJD/JSM).
Provided expert report and deposition testimony.

2018 - *Residential Funding Company, LLC v. HSBC Mortgage Corp. (USA)*, United States Bankruptcy Court for the Southern District of New York, Case No. 14-01915 (MG).
Provided expert report and deposition testimony.

2018 - *Federal Deposit Insurance Corporation as Receiver for United Western Bank v. RBS Acceptance Inc., et al.*, United States District Court for the District of Colorado, Case No. 1:14-CV-00418-PAB-MJW.
Provided expert report and deposition testimony.

2018 - *Federal Deposit Insurance Corporation as Receiver for Guaranty Bank v. RBS Securities Inc., et al.*, United States District Court for the Western District of Texas Austin Division, Case No. 1:14-cv-00126-SS.
Provided expert report and deposition testimony.

2017 - *Residential Funding Company, LLC v. Provident Funding Associates, L.P.*, United States District Court for the District of Minnesota, Case No. 13-cv-03485 (SRN/TNL).
Provided expert report.

2017 - *Ramon Moreno, et al. v. Deutsche Bank Americas Holding Corp., et al.*, United States District Court for the Southern District of New York, Case No. 1:15-cv-09936 (LGS).
Provided expert report and deposition testimony.

2017 - *Lou Baker, et al. v. SeaWorld Entertainment, Inc., et al.*, United States District Court for the Southern District of California, Case No. 3:14-cv-02129-MMA-AGS.
Provided expert report and deposition testimony.

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Legal Documents and Expert Reports	***Bates Start***	***Bates End***
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"Class Action Complaint (ERISA)," *Salvadora Ortiz and Thomas Scott v. American Airlines Inc., The American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union,* February 10, 2016		
"Declaration of James J. King, Jr., CFA in Support of Plaintiffs' Motion for Class Certification," *Salvadora Ortiz and Thomson Scott v. American Airlines, Inc., The American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union,* April 23, 2018 and exhibits thereto	APPX93	APPX110
"Declaration of Todd M. Schneider in Support of Plaintiffs' Motion for Class Certification," *Salvadora Ortiz and Thomson Scott v. American Airlines, Inc., The American Airlines Pension Asset Administration Committee, and American Airlines Federal Credit Union,* April 23, 2018 and exhibits thereto	APPX2	APPX18
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Declaration of Lewis Cohen, June 26, 2020		
Deposition of Salvadora Ortiz, October 3, 2018		
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"Retirement Savings Statement, American Airlines, Inc. 401(k) Plan – Salvadora Ortiz," *Fidelity Investments* , October 28–November 2, 2015		
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